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ERIELAND 2000: A COMPREHENSIVE ENVIRONMENTAL HEALTH SURVEY OF ERIE COUNTY, PENNSYLVANIA

National Center for Urban and Industrial Health
Washington, D.C.

1974

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LAKE ERIE
NEW YORK
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ERIELAND - 2000

Environmental Health Survey Report

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ERIELAND 2000

A COMPREHENSIVE ENVIRONMENTAL HEALTH SURVEY OF
ERIE COUNTY, PENNSYLVANIA

SPONSORED BY

ERIE COUNTY COMMISSIONERS
CITY COUNCIL OF ERIE
PENNSYLVANIA TOWNSHIP OFFICIALS ASSOCIATION
PENNSYLVANIA BOROUGHS OFFICIALS ASSOCIATION
PENNSYLVANIA DEPARTMENT OF HEALTH
PENNSYLVANIA DEPARTMENT OF COMMERCE
ERIE COUNTY HEALTH DEPARTMENT
ERIE COUNTY PLANNING COMMISSION
CITY OF ERIE HEALTH DEPARTMENT
CITY OF ERIE PLANNING COMMISSION
UNITED STATES PUBLIC HEALTH SERVICE
Region II, New York, New York
Environmental Sanitation Program
National Center of Urban & Industrial Health
Bureau of Disease Prevention and Environmental Control
Washington, D. C.

ERIELAND 2000 PROJECT

FOREWORD

This document is the combination of a tremendous amount of effort of people of all walks of life who are concerned about their environment and the health of their families. They are people who have, are, and will do something to ensure the best heritage possible for their community. They are politicians. They are professional and business people. They are politicians. They are professional and business people. They are educators. They are housewives and parents. They are people like you and me. They have the incessiable desire to make their environment the best place possible in which to live.

Because of this, Erie County was selected as the first area, by the Pennsylvania State Department of Health, and the U. S. Public Health Service, to conduct a demonstration on Urban Planning for Environmental Health, which was designated as the ERIELAND 2000 PROJECT. The enthusiasm and cooperation given by all concerned during these past months, has confirmed this confidence in the residents of Erie County. This report although only the beginning, is the concrete evidence of what a community can do.

It is our sincere desire and hope, that this demonstration project will be the inspiration and guideline to many other communities who will be compelled to want to follow this example and exhibit the same community spirit which has resulted in this ERIELAND 2000 PROJECT report.

Jerome H. Svore, Director
National Center for Urban and
Industrial Health

ERIELAND 2000 PROJECT

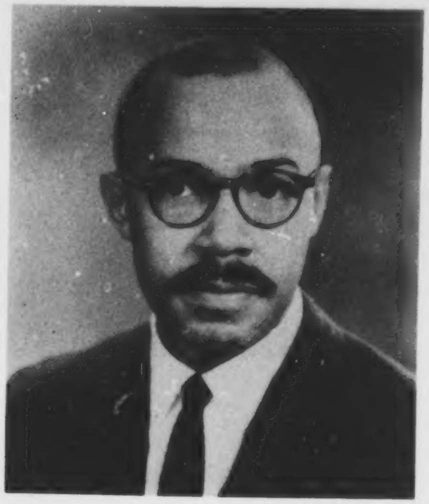
FOREWORD

As one peruses this Erieland 2000 Project report and the many recommendations contained therein, one cannot escape the realization that practically all of the facets of the urban health problems covered by this demonstration are "Environmental Sanitation" in content. For example..... Water ... Liquid Wastes... Solid Wastes... Air Pollution... Housing.. Recreation ... and, General Sanitation... all would be directly defined as such.

This demonstration program in Erie County once again focuses the attention of the citizen on this importance. Hopefully, it will excite his interest sufficiently so that he will demand that his community will pursue with every energy available, the attainment of the solution to whatever problems may exist in these areas of concern.

As this Demonstration now progresses into the Implementation Phase, and solution are developed, we in the Environmental Sanitation Program of the U. S. Public Health Service, sincerely hope that other communities will realize the importance of these environmental facets and will be inspired to similar action.

Richard Vaughan, Chief
Environmental Sanitation Program



COMMONWEALTH OF PENNSYLVANIA

THOMAS W. GEORGES, JR., M.D.
SECRETARY OF HEALTH

DEPARTMENT OF HEALTH
P O BOX 90
HARRISBURG 17120

February 21, 1967

Citizens of the Commonwealth of Pennsylvania
United States of America

Dear Citizen:

The rapid growth of the urban areas of our State is creating grave environmental health problems of considerable health significance. Our realization of these mounting concerns has prompted us to become interested in programs of assistance available to our State. One such program as provided by the Public Health Service has resulted in an excellent demonstration project in Erie County, Pennsylvania, known as the Erieland 2000 Project.

This survey report, resulting from the combined efforts of many community interests, is evidence that we cannot view with apathy the impending future of our urban complexes. But we firmly believe that environmental health problems can be met and mastered when citizens and government mobilize.

We commend the people of Erie County for their foresightedness and action towards making their community a more healthful place in which to live. And, we are pleased to cosponsor this effective Erieland 2000 Project with them and the Public Health Service. Further, we pledge our continued interest and support not only to Erie County but to other Pennsylvania communities who express their desire to team up with us to enhance their environment.

Sincerely,

Thomas W. Georges, MD
Thomas W. Georges, Jr., M.D.

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF HEALTH
P. O. BOX 90
HARRISBURG 17120

THOMAS W. GEORGES, JR., M.D.
SECRETARY OF HEALTH

February 21, 1967

The processes whereby a community views its present environment, evaluates the current problems and develops future programming of its resources to resolve these problems are manifold.

Erie has employed one useful approach -- the demonstration technique. The Erieland 2000 Project Report is an excellent result of this technique. Community-wide goals for Erieland have been developed through united consideration by the participating citizens and organizations. However, success is not assured. Too often communities have surveyed and relaxed. Thus, much of their effort has been in vain.

It is the hope of the Bureau of Environmental Health that this is, in fact, the beginning of the needed programming in Erie County which will demonstrate to other communities, not only in Pennsylvania, but elsewhere in these United States, that one of man's most prized possessions -- his environment -- can and must be clean, beautiful and healthful.

Sincerely yours,

Wesley E. Gilbertson

Wesley E. Gilbertson, Director
Bureau of Environmental Health

F.S. SHUBERT, M.D., MEDICAL DIRECTOR, ERIE COUNTY AND CITY

William O. Hill, Jr.
Louis J. Rzymek
Fred W. Lamberton
Commissioners of Erie County, Pennsylvania

OFFICE OF
Erie County Department of Health
4728 Lake Pleasant Road
ERIE, PENNSYLVANIA 16504

F. S. Shubert, M.D.
Deputy Director
Board of Health
Russell B. Roth, M.D.
R. C. McChesney, D.D.S.
S. E. Cronen, M.D.
J. E. Brown, M.D.
Luman C. DeLong

January 25, 1967

It was my privilege to welcome the study entitled "Erieland 2000" in September 1965 and to follow it through till fruition here in 1967. We have gained, as a community, knowledge of our many good and also our bad facets. Through this extended view of our present environment and that which we may anticipate in the near future, we may begin to plan now for a healthier place to live for ourselves and our progeny.

Those who have supported and followed this study will take special notice of the fact that a number of the recommendations are being acted upon.

This type of program, we feel, will be a guide to other communities in our state and nation interested in studying their own environmental health status for healthier and safer communities.

F. S. Shubert M.D.

F. S. Shubert, M.D., Medical Director
Erie County and City Health Departments

PURPOSE AND OBJECTIVES

NORMAN E. TUCKER, P.E.

DEMONSTRATION COORDINATOR

U.S. PUBLIC HEALTH SERVICE

PURPOSE AND OBJECTIVES

Norman E. Tucker

During the past eight years the U. S. Public Health Service, through the Office of Urban Environmental Health Planning, has diligently sought new techniques and criteria that could be applied to insure a more healthful environment in our growing urbanized areas. The development of the Environmental Health Planning Guide (PHS Publication Number 823, Revised 1967) as a tool to be employed by citizens and agencies in all communities, was one such product of these efforts.

This "Guide" has been used in dozens of areas independently by citizen groups, or with the cooperation of the appropriate planning and health agencies with most gratifying results. It was the basis for the data gathering and survey report (Phase II) of this ERIELAND 2000 PROJECT.

In addition to this "Guide" the Public Health Service co-sponsors Governor's Conferences on Urban Planning for Environmental Health, a number of specially designed training courses to meet local requirements, and one - three day community interest and awareness conferences as requested. One such One-Day Conference served as the kick-off (Phase I) of the ERIELAND 2000 PROJECT.

Although all of the above mentioned programs have an important role, the most comprehensive approach in any area is by the technique of "demonstration." Since a demonstration is defined as the practical application, then obviously this technique goes far beyond mere identification and survey. But, by the same token, such a demonstration can only succeed through a high degree of community involvement, initiative, and tenacity of purpose, coupled with action programs to obtain results. This is readily understood as the reader of this document peruses the pages that follow. By such cooperation, total involvement and the proper application of the Environmental Health Planning Guide during this past year, the ERIELAND 2000 PROJECT has truly demonstrated that the environment is everyones concern and that problems pertaining to health can be identified and treated successfully.

And... even though the City and County of Erie have not yet found the solution to all of its urban problems, they have come a long way since the birth of ERIELAND 2000 and are firmly embarked upon the right path for their future growth.

As Phase III unfolds, as more and more implementation of the recommendations contained in this document are realized, then gradually Erie will become the living example of what other communities can do if they, too, embark upon a similar demonstration program.

POLITICAL SUBDIVISIONS

POLITICAL SUBDIVISIONS

CITY OF ERIE
CITY OF CORRY
LAWRENCE PARK TOWNSHIP
ALBION BOROUGH
CRANESVILLE BOROUGH
EAST SPRINGFIELD BOROUGH
EDINBORO BOROUGH
ELGIN BOROUGH
FAIRVIEW BOROUGH
GIRARD BOROUGH
LAKE CITY BOROUGH
MIDDLEBORO BOROUGH
MILL VILLAGE BOROUGH
NORTH EAST BOROUGH
PLATEA BOROUGH
UNION CITY BOROUGH
WATERFORD BOROUGH
WATTSBURG BOROUGH
WESLEYVILLE BOROUGH
AMITY TOWNSHIP
CONCORD TOWNSHIP
CONNEAUT TOWNSHIP
ELK CREEK TOWNSHIP
FAIRVIEW TOWNSHIP
FRANKLIN TOWNSHIP
GIRARD TOWNSHIP
GREENE TOWNSHIP
GREENFIELD TOWNSHIP
HARBORCREEK TOWNSHIP
LeBOEUF TOWNSHIP
McKEAN TOWNSHIP
MILLCREEK TOWNSHIP
NORTH EAST TOWNSHIP
SPRINGFIELD TOWNSHIP
SUMMIT TOWNSHIP
UNION TOWNSHIP
VENANGO TOWNSHIP
WASHINGTON TOWNSHIP
WATERFORD TOWNSHIP
WAYNE TOWNSHIP

William O. Hill, Jr.
Erie County Commissioner

Chm

Louis J. Rzymek
Erie County Commissioner

Fred W. Lamberton
Erie County Commissioner

FRED W. LAMBERTON

Honorable Louis J. Tullio
Mayor, City of Erie

City Councilmen
Left to right:
Patrick S. Cappabianca; William F. Feehley;
Robert J. Glowacki; Robert C. Bradbender,
Council President; Bernard J. Harkins;
Dr. Harold W. Kinter; Richard F. Scheffner.

MR. JOSEPH SINNOTT

Joseph W. Sinnott, Director
Department of Public Safety

COMMITTEES

ERIELAND 2000

COMMITTEES

STEERING COMMITTEE:

Gerald Farmer, Erie County Department of Health
Lawrence R. Moriarty, Erie County Department of Health*
Louis J. Tullio, Mayor, City of Erie
Christopher Capotis, Erie County Planner
Louis J. Rzymek, Erie County Commissioner
Charles Reeve, City of Erie Planner
R. J. VanDerwerker, U. S. Public Health Service, New York
J. P. Bricker, Erie County Supervisors' Association
Walter N. Heine, Pennsylvania Department of Health, Meadville
Lewis D. Williams, M. D., Pennsylvania Department of Health, Meadville
F. S. Shubert, M. D., Erie City-County Health Departments
William O. Hill, Jr., Chairman, County Commissioners
Tom West, Erie County Department of Health
Larry Miller, State Health Department
John Moss, Community Planning Consultant, Pennsylvania Department of Commerce

ADVISORY COMMITTEE:

J. P. Scottino, Ph. D., Chairman, Gannon College
G. R. Carpenter, M. D., Pennsylvania Department of Health, Harrisburg
R. J. VanDerwerker, U. S. Public Health Service, New York
F. S. Shubert, M. D., Erie City-County Health Department
Stan Neathery, Planning Consultant
Christopher Capotis, Erie County Planner
Charles Reeve, City of Erie Planner
R. O. Byers, M. D., Erie County Medical Association
W. A. Peiffer, Mayor of Corry
Dr. Loring, U. S. Public Health Service, Washington, D. C.
George S. Pulakos, Erie County Supervisors' Association
Gerald Farmer, Erie County Department of Health

*Resigned

ERIELAND 2000

CATEGORICAL COMMITTEES

PLANNING

S. Nethery (Ch.), Planning Consultant
C. Capotis, County Planner
C. Reeve, City Planner
O. Sutermeister, P. H. S. Planner
W. Hill, County Commissioner, City Redevelopment Auth.
Dr. J. P. Scottino, Gannon College

SOLID WASTE

E. Alexandrowicz (Ch.), Pennsylvania Department of Health
R. Orlando, City Parks Department
C. Capotis, County Planner
L. Crane, P. H. S., Sanitary Engineer
R. Stitt, Landfill Operator
W. McLaughlin, Township Supervisors' Association, Borough Association
L. Moriarty, County Sanitary Engineer, City Councilman
Erie Manufacturing Association

HOUSING

J. McLaughlin (Ch.), City Health Dept.
C. Capotis, County Planner
R. Swiecicki, State Housing (H. D.)
N. Rydland, Public Health Service
W. Hill, County Commissioner
B. Harkins, City Councilman
J. Schmid, City Housing Authority
L. Moriarty, County Health Department
C. Reeve, City Planner
D. Chiaramonte, City Housing Inspector
F. Thompson, Anti-Poverty
D. C. Lindgen, Security-Peoples Bank
H. J. Boehm, Real Estate Association

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W. Williams, City Smoke Abatement (Erie)
C. Capotis, County Planner, Industry Mfg. Representative
Union City - Lawrence Park
Attorney J. Held, State Air Pollution Comm.
A. Tanilin, Pennsylvania Electric Co.
G. Minadeo, City School District

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G. Farmer (Ch.), Health Educator
C. Kuehn, M. D., Pennsylvania Department of Health Director
Dr. Hopkins, County Medical Society
G. Graves, T. B. Association
Dr. Herman, Public Health Service
D. Johnson, Corry City Engineer, Borough Association
Mrs. T. E. Kuryla, League of Women Voters
Miss H. Uhlman, Visiting Nurses Assn.
L. Moriarty, County Health Department
C. Reeve, City Planner
Weldon Fill, U. S. Public Health Service
B. Discanio

RECREATIONAL SANITATION

P. Russo (Ch.), County Recreation
M. Wargo, Presque Isle State Park
R. Orlando, City Parks Department
J. Granahan, County Health Department
W. Middendorf, Pennsylvania Health Dept.
Mr. Schock, U. S. Public Health Service
D. Coryell, Millcreek Rec. Officer
R. Gindelsperger, Supervisors' Assoc. Boat Association, Chamber of Commerce
T. K. Welsh, Erie Yacht Club

WATER

R. Gindelsperger (Ch.), Supervisors' Association
W. DeArment, City Water Works Superintendent
S. Nethery, Planning Consultant
C. Capotis, County Planner
L. G. Martin, U. S. Public Health Service
W. Heine, Pennsylvania Department of Health, Borough Association
J. B. Nesbeth, Penn State, P. H. D.
J. G. Klier, Supervisors' Association
L. Miller, State Health Department
W. A. Lupther, U. S. Soil Conservation
P. Orner, Farmers Home Administration

(Categorical Committees Continued)

LIQUID WASTE

Mrs. J. E. Henning, (Ch.), League of Women Voters
P. Cygon, City Sewage Plant
Dr. Brown Industry - Hammermill
S. Nethery, Planning Consultant
E. J. Anderson, Public Health Service
W. Heine, Pennsylvania Department of Health
C. W. Youngs, Supervisors' Association, Borough Association
W. Hill, County Commissioner,
D. DeHaven, Sportsmen's Association
N. Ely, Fish and Game Commission

Lawrence R. Moriarty
Former Director of Division of
Environmental Health

Chairman, Steering Committee*

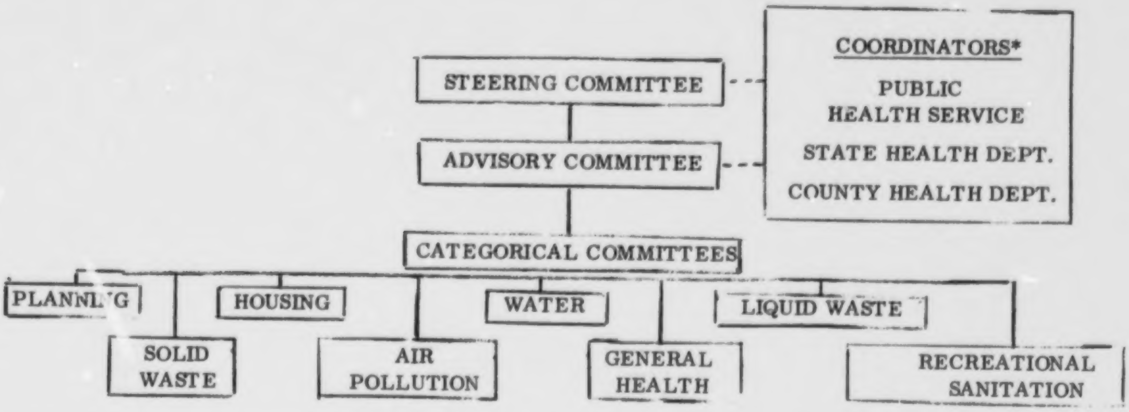
Gerald Farmer
Health Educator
Erie County and City Department
of Health

Chairman, Steering Committee

*Resigned

ERIELAND 2000

ORGANIZATION CHART AND COMMITTEE STRUCTURE


STEERING COMMITTEE
ADVISORY COMMITTEE
COORDINATORS*
PUBLIC HEALTH SERVICE
STATE HEALTH DEPT.
COUNTY HEALTH DEPT.
CATEGORICAL COMMITTEES
PLANNING
HOUSING
WATER
LIQUID WASTE
SOLID WASTE
AIR POLLUTION
GENERAL HEALTH
RECREATIONAL SANITATION

COMMITTEES

STEERING

- L. R. Moriarty, (Ch.), Erie County Department of Health*
- L. J. Tullio, Mayor, City of Erie
- C. Capotis, Erie County Planning Commission
- N. E. Tucker, U. S. Public Health Service* (Washington, D. C.)
- L. J. Rzymek, Erie County Commissioner**
- C. Reeve, Erie City Planning Commission
- R. J. VanDerwerker, U. S. Public Health Service (New York)
- J. P. Bricker, Erie County Supervisors' Association
- W. N. Heine, Pennsylvania Department of Health (Meadville)
- L. D. Williams, M. D., Pennsylvania Department of Health (Meadville)
- C. N. Best, Pennsylvania Department of Health (Harrisburg)*
- F. S. Shubert, M. D., Erie City-County Health Departments
- J. W. Bartley, Department of Commerce*** Erie County Borough Association
- G. Farmer, Erie County Health Department

ADVISORY

- J. P. Scottino, Ph. D., (Ch.), Gannon College
- G. R. Carpenter, M. D., Pennsylvania Department of Health (Harrisburg)
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- C. Reeve, Erie City Planning Commission
- R. O. Byers, M. D., Erie County Medical Association
- W. A. Peiffer, Mayor of Corry
- Dr. Loring, U. S. Public Health Service (Washington, D. C.) Erie County Borough Association
- G. S. Pulakos, Erie County Supervisors' Association
- P. Schaaf, Attorney, City of Erie

* Coordinators for Federal, State, and County.
** May be represented by all Commissioners.
*** Replaces Mr. Nethery, who resigned.

PRESS
COVERAGE

Among officials at Thursday's all-day seminar of Erieland 2000, planning on environmental health, held at the Gannon Playhouse and the Boston Store Dining Room were, from left: Lawrence Moriarty, head of the division of environmental health for the Erie County Health Department; Christopher Capotis, director of the Erie County Planning Office and Callis H. Atkins, assistant surgeon general of the United States.

ERIE GROUP FIRST IN NATION

Industrial Growth, Tourism Can be Aided by Planning

Lack of planning for environmental health will not only result in hazards to life, but will hurt industrial growth and affects tourism.

This was stressed repeatedly at the all-day seminar Thursday of Erieland 2000, an organization dedicated to the planning of the environmental health of this area up to the year 2000.

Erieland 2000 comprised of county, state and federal health officials, elected officials of the city, townships, boroughs and county, municipal bureau chiefs and planners, became the first organization of its kind in the United States.

Now there are only four such organizations in the country.

"It exists in Erie, not that it is needed here more than anywhere else, but because this area is the first to awaken to the fact of the importance of environmental health planning," said Norman E. Tucker of Cincinnati, O., chief of Metropolitan Planning and Training for the U. S. Health Service.

Keynote speaker was the U. S. Assistant Surgeon General Callis H. Atkins.

He said although there is a great potential danger in man's environment, "there is also the hope that mankind, in the years ahead, can achieve unprecedented advances."

Atkins told the gathering: "Man now has the power to control his environment and make the benefits of science and technology, as expressed through education, medicine, engineering and agriculture, available to all.

"You are facing up to the challenge," he told the group.

Two hard examples of how environmental conditions such as pollution had caused serious damage were given at the seminar.

Michael E. Wargo, superintendent of Presque Isle State Park, said water pollution caused a 10 per cent drop in "projected" attendance figures at the Peninsula this summer.

He said figures projecting attendance at the Peninsula now and in the future indicated this past summer's attendance of more than two million should have been 250,000 more.

Basing this on an estimate that these missing tourists would have spent $10 a day in the city if they had come to the park, this is a loss of $2,500,000 to the community, Wargo said.

He also said publicity given to pollution condition of any part of Lake Erie, whether this publicity comes out of Pittsburgh Buffalo or Cleveland or elsewhere, potential tourists will think Presque Isle is also polluted.

Victor H. Sussman, director of the Division of Air Polution Control of the Pennsylvania Department of Health, told of how nothing was done in Pennsylvania regarding air pollution until the Donora disaster of 1948.

This incident, where air was polluted because of coal combustion and the releasing of sulphur dioxide, 22 people died and 3,000 became ill.

He said Los Angeles ignored its smog problem until it was almost too late and now that city has one of the best air pollution controls in the country.

Sussman said air pollution control usually comes "after the horse flees the barn."

He recommended that Erie operates its own air pollution control program.

The assistant surgeon general said environmental health facilities and services in the past have generally been planned and administered with too little attention to the total development picture of the area they serve.

Atkins also said environmental health problems have been given sufficient priority in overall community planning.

He warned: "We are adding pollutants to our environment at a much faster rate than nature can cleanse itself."

Norman Rydland, a senior sanitary enginneer of the U. S. Health Dept., said an environmental health problem that must be faced up to is housing.

He called for stricter building codes, a problem he termed too lax everywhere.

Rydland said in 1960 there were 15 million housing units in U. S. cities that were deficient in hot water and other plumbing facilities. He said 36 per cent of homes outside of urban areas are dilapidated and also without adequate plumbing.

How is Erieland 2000 organized? It will have eight study categories: planning, solid wastes, housing, air pollution, general health, recreation, water pollution and liquid wastes.

Financial aid can be had from the state and federal governments.

Other speakers included: City of Erie—Wallace DeArment and Charles Reeves; county—Dr. Felix Shubert and Christopher Capotis, State—Edward Stockton and Louis Lex Jr.; federal—M. Devon Bouge and Ralph J. Black and private engineering—Gerald I. Brask of Chicigo.

ERIE, PA., THURSDAY, SEPTEMBER 30, 1965

Officials gather prior to opening of Environmental Health Conference. From left: Msgr. Wilfrid J. Nash, president of Gannon; Lawrence R. Moriarty, head of Erie County Department of Environmental Health; Charles Best, environmental health consultant, state Health Department; Callis Atkins, assistant surgeon general, U.S. Public Health Service; and Norman E. Tucker, of U.S. Public Health Service.

Park Chief Says Dirty Lake 'Costly'

By DAVID STOUT

Wate pollution helped cause a ten per cent drop in attendance figures at the Peninsula this summer and a loss of $2,500,000 to the community, Michael J. Wargo, superintendent of Presque Isle State Park, said today.

He based the figure on the fact that attendance was down about 250,000 fro last summer, and that these tourists would have spent about $10 per day in the city if they had come to the park.

Wargo blamed the attendance drop on the wide-spread publicity given to the pollution conditons now existing in the lake.

He noted that the section of the lake around Erie is not nearly as bad as the portion of the lake farther to the west, but said oxygen depletion caused by growth of algae had still done great harm to the lake in this area.

Wargo noted improvements being made in sanitary facilities at Presque Isle and said that the public, which is becoming increasingly conscious of pollution, is demanding more and more sanitary improvements.

Noting Erie's ideal location as a tourist center, Wargo said, "We cannot afford to make mistakes and flub our pportunity."

Wargo made these remarks to a large gathering of federal, state and local environmental health officials at the Gannon College theater.

Several dozen health experts are gathered at the theater for a conference on planning for environmental health.

The conference, "Erieland 2,000," is designed to project Erie County's environmental health needs up to the year 2,000.

The meeting of the steering committee of the conference began at 9 a.m., with County Planning Director Christopher Capotis as chairrman.

Introductory remarks were made by Msgr. Wilford Nash, the president of Gannon College.

Wargo's remarks followed an address by Edward Stockton, of the Allegheny County Health Department's Bureau of EnvironmentalH ealth. He called for the near elimination of septic tanks, saying they were acceptable "only on farms or for extremely isolated residences."

Stockton said it was necessary for various levels of government to work toether in solving the community's health problems.

The theme of cooperation was also cited in earlier talks by two planning officials.

Norman E. Tucker, chief, Metropolitan Planning Training of the Robert A. Taft Engineering Center, Cincinnati, O., said that people had been slow in awakening to the importance of planning.

"We haven't given planning the emphasis it should have," he said. "If the citizen is not behind us, we are dead," he added.

Tucker said Erie's problems are not unique, but are shared with other major cities in the country and can be solved by increased effort.

He cited inadequate treatment of sewage and refuse as two critical problems facing many communities, including Erie. He noted that only about half of the nation's cities with a population higher than 25,000 have adquate "nuisance-free facilities" for refuse treatment.

Louis Lex, Jr., a member of the State Bureau of Community Development, agreed with Tucker that public cooperation was vitally necessary in solving the problems of the nation's cities.

Lex cited the problems of redeveloping older communities as the most difficult ones facing planners.

"The planner has to manipulate a legacy of old physical and economic relationships that act as an anchor. He must ferret out problems that have arisen in the past and anticipate trends that will arise in the future," Lex said.

'Erieland 2000' To Hear Expert

Top health and planning experts of the country and area will be speakers at a meeting of the steering committee of "Erieland 2000" scheduled from 9 a.m. to 5 p.m. Thursday Sept. 30 in Gannon College theater.

The committee is active in studies on pollution, housing, sewage and other environmental conditions.

Speakers and officials include Norman E. Tucker, chief of the metropolitan planning training program of the U.S. Public Health Service in Cincinnati; L. Lex Jr., chief of the planning division of the bureau of community development of the Pennsylvania Dept. of Commerce; E .Stockton, chief of the Bureau of Environmental Health, Allegheny County Health Dept.; Mike Wargo, superintendent of Presque Isle State Park.

Also, Wallace DeArment, head of the City of Erie Water Bureau; Charles Reeves, of the Erie City Planning Commission; F. Jaycocks, chief of Housing and Hygiene Section, U.S. Public Health Service, Washington; V. Sussman, chief of Air Pollution Division, Pennsylvania Department of Health.

And, J. Brask, consulting engineer of Consoer, Townsend and Associates, Chicago; R. Black, chief of Solid Wastes Engineering Section, U. S. Public Health Service, Washington, D. C.; Dr. Felix Shubert, director, City-County Health Department; C. Aikens, chief sanitary engineer, U. S. Public Health Service; Lawrence R. Moriarty, director of the division of environmental health of the Erie County Health Department and C. Best, environmental health consultant of the State Health Department.

Consultant On Health Survey Due

Two planning consultants from the U. S. Public Health Service were due here this afternoon to meet with the planning committee for the Environmental Health Survey.

Stan A. Neathery, regional administrator for the state's Bureau of Community Development, said the purpose of the meeting was to determine what data should be collected in the survey.

The planning committee will then prepare a written outline for the benefit of the other committees making the survey.

The planning consultants expected at the session were Oscar Sutermeister and Norman Tucker.

Tucker, who is chief of metropolitan planning training for the Public Health Service in Cincinnati, has been instrumental in arranging the Erie survey, which is a pilot project for the nation.

It will consider all areas of environmental health such as water purification, sewage treatment and refuse disposal.

The survey has been titled Erieland 2000

Members of the planning committee are City Planning Director Charles Reeve, County Planning Director Christopher Capotis, Dr. Joseph Scottino of the Gannon College faculty and Neathery.

Neathery said he also expected at least one county commissioner to attend today's meeting at city hall.

Erie In Year 2000

City and county officials deserve credit for the initiative shown in scheduling the "Erieland 2000" conference on Sept. 30 at the Gannon College Theatre.

There have already been indications that major news may develop from this attempt to assess Erie's development, particularly from the environmental health point of view, 35 years from now.

For one thing, Water Bureau Chief Wallace DeArment is expected to offer the clearest exposition to date of the city's views on a Metro Water System. A more progressive attitude than has been shown in the past few months is generally anticipated.

City, county, state and federal officials will participate in the day long meeting.

Overall purpose is to map plans for an intensive study of environmental health conditions and needs in the county.

Included will be such wide-ranging topics as housing, rodent and air pollution control, water, sewage and refuse.

Both Christopher Capotis, county planning director, and Charles Reeves, city planning director, are scheduled to speak, offering an overall planner's viewpoint.

All of these subjects deserve a long range examination and the day-long conference is an excellent idea.

Discuss New Health Building

County Health Department officials met this week with the consulting architect to discuss the proposed new health building.

It was the first in a planned series of conferences for the purpose of preparing construction plans.

Architect Henry T. Gray met with Dr. Felix S. Shubert, acting health director, Thomas C. West, sanitary engineer, and Gerald Farmer, education director.

Commissioners are on record as supporting a lease arrangement with a developer for construction of the proposed health building.

Gray is preparing construction drawings for bids by developers.

Once the building is completed, the county would endorse a long-term lease on it.

Early estimates indicate the building will have about 6,500 square feet of office space, and a parking lot of about the same size.

Early estimated lease costs were about $12,000 annually, but did not include space for a parking lot, as compared to about $6,000 now spent each year for rent.

State Suggests City-County Health Bureau

A State Health Department aide said Wednesday the city and county health departments should get together—and soon—to provide more services in a more efficient manner.

Dr. Carl Kuehn, in an exclusive conversation with The Morning News, said he and the State Health Department would prefer a "combination or merger" of the health departments.

"But if the politicians can't get together on the merger, we would accept an alternative," he said.

Kuehn, director, Bureau of Field Services with the department, was here yesterday for a meeting with one of the planning committees of "Erieland 2000," a local group developing an overall health services master plan to serve this area through the year 2000.

The city health department has never received a state grant, because it has failed to qualify, since it does not have either the quantity or quality of personnel, and does not provide a broad enough range of services at a high enough level of efficiency.

Based on an estimated population of 140,000, the city could get maximum state funds of $100,000 a year at the rate of 75 cents per person.

However, the grant never exceeds 50 per cent of the total budget of the local department.

Regarding the alternative, Dr. Kuehn described it as "a marriage" of the departments, a "borrowing of top supervisory personnel," or even a "lend-ease" plan.

Such a proposal has been originated and is progressing.

The city has asked for—and ounty commissioners have tentatively agreed to—share the county's sanitary engineer and health education officer with the city.

Such a move would satisfy one of the requirements for state aid, but Dr. Kuehn indicated other provisions would have to be met, also.

"This type of contractual agreement has been reached in other Pennsylvania localities," he said, "but I must admit that in most cases eventually the departments are merged."

He mentioned that Allentown and Bethlehem have formed a bi-city health department, and that the State Health Department is even considering a proposal to establish an inter-state health department.

The state has been after city officials to take necessary steps to qualify for state aid for years.

Applications from Erie for state funds have repeatedly been turned down.

"The trend in Pennsylvania," Dr. Kuehn said, "is actually toward district departments."

He said merging has become a necessity in order to provide health services to those in smaller communities which cannot afford to do so.

Dr. Kuehn briefed City Council President Bernard J. Harkins, who is expected to discuss the subject with other councilmen as soon as possible.

Harkins indicated that at present he leans toward the alternate method, rather than a merger, "so that the city can retain its sovereignty."

Harkins said the city has had its own health department "for about 93 years," and has spent a lot of money in developing it.

Two Erieland Units Formed

Two major committees have been formed to evaluate health-related services and facilities for Erie County in the "Erieland 2000" program, according to the County Health Department.

The planning committee, headed by County Planning Director Christopher Capotis, includes City Planning Director Charles H. Reeve Jr.; Dr. Joseph Scottino, Gannon College; Stan A. Neathery, State Bureau of Community Development; Oscar Sutermeister, and Norman Tucker, both of the U.S. Public Health Service.

The housing committee, of which Chief City Housing Inspector James McLaughlin is chairman, consists of County Commissioner William O. Hill; Robert F. Swiecicki, chief of the State Department's Housing Hygiene Section; Capotis; L. Norman Rydland, U.S. Public Health Service.

Also, City Councilman Bernard J. Harkins; Housing Authority Executive Director Joseph Schmid; Fred Thompson of the Anti-Poverty staff; Dennis Chiaramonte, city housing division, and Lawrence Moriarty, director of the County Health Department's Division of Environmental Health.

Undeveloped Land Acreage Will be Consumed by 1975

Undeveloped land acreage within the City of Erie is fast disappearing and at present consumption rates this land will be consumed by 1975.

This was reported by "Erieland 2000," a project designed to evaluate and plan for elimination of environmental health hazards for the next 40 years.

Recommendations by Erieland 2000 will not be released at this time, because of further reevaluation by the committee:

Some of its findings, however, are:

Erie County's housing condition overall is less severe than that of the average community in the nation. There are 10,008 deteriorating units in the county, or 12.6 per cent compared to the national average of 14.4 per cent.

In Erie. 12.9 per cent of the 5,647 units are deteriorating and 3.1 per cent are dilapidated. The county has 4.3 per cent (3,325) units) uninhabitable dwelling units of which 604 are in the city and 2,710 in the county.

The highest incidence of housing code violations are in older homes. The majority of blighted structures in Erie are in older neighborhoods involving multipfamily structures.

With Erie's land growth stymied, the population growth will be limited to 10,000 individuals unless there is a shift from one family to multi-family and high rise apartment housing.

Unless this happens, an increased rise in suburban population is expected. Millcreek alone has had a 464 per cent increase in population since 1930.

Factors contributing to Ere's housing problem are: low income families (9,869 families earn less than $3,000 a year); aging structures; lack of adequate and resonable financing to accomplish repairs; previous lack of housing regulations, absentee ownership; ineffective and disregard of zoning regulations in past years; change in owner-occupied neighborhoods to transient - type tenants, unemployment.

Erie's slum and blight areas represent 18.7 per cent of the total housing but contribute the following precentiles: 63 of TB and VD; 49 of adult arrests, 49 of juvenile crimes; 36 of secondary school dropouts; 28 of fires, 36 of dilapidated and deteriorating dwelling units, 21 of the total city population.

Erie 2000 Study Ends

The Housing Subcommittee of the Erieland 2000 Program has completed its study and will release its findings for publication in the near future.

The subcommittee is one of a number of such groups in Erieland 2000, which is a massive effort to plan for meeting the health and environmental needs of Erie up to the Year 2000.

At a meeting in City Hall today, Chairmen were being selected for the few remaining committees which have not been organized completely.

IN HEALTH STUDY

Expanded County Role Recommended

By GARTH MINEGAR

Erie County government will be asked to assume an expanded financial and administrative role in providing comprehensive environmental health improvements, a confidential report revealed today.

The recommendations in the year-long study by the committees of Erieland 2.000 will be presented to municipal officials Tuesday at 2 p.m. at City Hall.

Erieland 2.000 is a comprehensive environmental health investigation undertaken under auspices of the U. S. Public Health Service, the State Health department, and the city and county health agencies.

Officials from the federal agency and the U. S. Department of Housing and Urban development will be present for Tuesday's session.

Among the many recommendations contained in the lengthy report is one that county governments proposed metropolitan water system be implemented, as outlined nearly two years ago, using the Erie City system as a base.

Other recommended improvements are in the areas of need for water, city and county health services, air pollution, sanitary sewer systems, housing, recreation, Presque Isle State Park, campsites and trailer parks.

It will be recommended that the County Planning department be almost doubled in size and in its budget appropriation.

This will be needed because of the many functions envisioned for the planning staff.

It is recommended the Planning department establish distinct elements for its staff to conduct urban and rural planning studies, the preparation of codes for townships and boroughs, enforcement activities, continuation of the urban renewal program, and assist other municipalities which cannot afford planning agencies.

It will also be suggested county government sponsor an inservice training program for local government officials in municipal administration and management.

It will also be proposed that the county and other municipalities commit themselves to substantially larger appropriations in a support of planning and the enforcement of health and housing codes.

Among the other proposals, is one calling for the establishment of an office of air pollution control and the city health department, and the restoration of the meat and milk inspection programs.

County Criticizes Erieland 2000 Charge Of Water Plan Failure

A preliminary report by the Erieland 2000 water committee has drawn sharp criticism from county commissioners and the planning department.

The report maintains the planning office and commissioners have failed to cooperate with other county departments —namely the health office—in their attempts to establish some type of metropolitan water facility.

Gerald Farmer, health department education director, said today the committee report was only a preliminary draft and would be substantially rewritten.

Planning Director Christopher Capotis maintained last week the sections in question were written by former health department sanitary engineer Lawrence R. Moriarty, "who was usually at odds with our work".

Admittedly, there was no love lost between Capotis and the former health official, who is now an employe of the U.S. Department of Health, taking part in the Lake Ontario water pollution study.

Erieland 2000 is an environmental health study which attempts to find solutions to community problems through the year 2000.

The complete report from the project group, which includes 10 committees, will be released in September.

The water committee was composed of Capotis, Harborcreek Supervisor Robert Gindlesperger, former Water Bureau Chief Wallace DeArment, John Klier, representing the boroughs association, a representative of the Public Health Service and two other officials who have now moved from the area to other jobs.

The report states the planning department, "while ambitious in its desire to provide water for the entire metropolitan area, has failed miserably in:

"1) Coordinating interested political subdivisions into a solid bloc behind its venture. The planning department has failed to take representatives of the metropolitan political entities into its confidence relative to water.

"2) In working with other departments, such as the health office, in soliciting background information and knowledge."

The report also says the commissioners in their desire to effect a service for residents, have lost sight of the need for coordination and cooperation between agencies under their jurisdiction.

Commissioners and Capotis strongly criticized the statements, and indicated they would direct a formal comment to the committee through the planning director when the report is revised.

Knee-Deep In Garbage

Refuse disposal shows every indication of developing into another water problem—a long, drawn-out dispute with everybody eventually mad at everybody else.

The water issue has pitted suburb against central city and refuse seems headed for a similar contest of wills.

Actually, both issues are metropolitan problems and should be dealt with on a cooperative city-county basis.

The idea that refuse is strictly a county problem is a fallacious one. Over 50 tons of non-combustibles are transported daily from the two city incinerators to land fills in the county.

A joint city-county meeting on the refuse problem is imperative.

An "Erieland 2000" committee report has made it clear that immediate action (on the refuse problem) is needed or residents of the area "would be knee-deep in garbage by the end of the summer."

Let's not wait until the prediction materializes before taking action.

Committees Report On Pollution

2/24

Major reports on Erie County pollution sources and their effects were to be heard by the Liquid Wastes Committee of "Erieland 2000" today at a meeting at Hammermill Paper co.

The County Planning Office and the County Health Department operate the "Erieland 2000" program set up to improve housing, recreation, sanitation and water supply in the Erie area.

Two of the groups working on the project—the Liquid Waste and Water Supply Committee—are expected to have their work finished in time for the Statewide Water Pollution Institute, to be held here June 5-7.

Gerald Farmer, sanitation educator for the health department, said today's meeting was to deal specifically with the degree of pollution being caused in Erie County by community sewage treatment plants and insecticides.

State Fish and Game Commissioner Norman Ely was also scheduled to report on fish which have been eliminated from area waters, presumably by pollution.

Farmer said work of the committees will be submitted to the advisory committee of "Erieland 2000" by May 15 and then to the group's steering committee for implementation.

County Gets Federal Funds For Refuse Disposal Study

Democratic commissioners indicated today they would advertise for bids for a refuse disposal study as soon as they receive formal notification that federal funds have been granted for it.

Congressman Joseph P. Vigorito reported late Tuesday that the U.S. Public Health Service has awarded a $22,665 grant to the county for the first year of the proposed investigation.

However, the actual refuse disposal study part of the program is only expected to take four or five months, Gerald Farmer, County Health Education director, said.

The remaining reports to be prepared in the two-year survey will be handled by Farmer's office, and will include sociological studies.

The Public Health Service will allot $6,666 for second year work, from June 1, 1967 to May 31, 1968.

Estimated cost of the refuse disposal survey has been informally set at $33,000.

Of the remaining county share of $11,335 above the amount allocated by the federal agency, the Health Department will contribute about $2,000 to $3,000 in services.

This will leave an actual cash outlay of $8,000 to $9,000, Farmer stated.

Commissioners William O. Hill Jr. and Louis J. Rzymek said today they wanted advertisement for bids for the study immediately.

"We can't wait any longer to get this project going," Hill added.

Commissioners made application for funds about eight months after Health department officials warned of a serious shortage of space for disposing of solid wastes—non-combustibles from the Erie City incinerator, garbage and trash.

A top-level "Erieland 2000" Solid Wastes committee report earlier this year said immediate action was needed on the refuse disposal problem "or residents would be knee-deep in garbage by the end of the summer."

The county has indicated it would like the city to split the local share costs of the study, and Commissioner Fred W. Lamberton last week refused to discuss advertisement for bids until the city committed itself.

The study will survey existing methods of disposal, collecting, and transporting wastes.

It would propose recommendations on means of disposal, methods of collecting and transporting, establishment of rates of collection, how sites could be obtained, a program of development and financing whether an authority was needed, and whether more incinerators or landfills would solve the problem.

Under law, the county can operate refuse disposal plants, incinerators, and landfills, and might have to take interim action until the study is completed and implemented.

The Erieland committee report stated that with one exception landfill operations in the county were not profitable, and as the result sanitary conditions were not good.

The report also labeled the vehicles of the city's licensed refuse collectors as "poor," and the service "poor and expensive."

The committee study said about 50 tons a day in non-combustibles are transported to a landfill from the city incinerator.

BUT OTHER CITIES FAR WORSE

Erie Has 7,008 Housing Units Deteriorating Or Dilapidated

The housing committee of the 'Erieland 2000' program, after an intensive study, has concluded that Erie's housing situation is far better than those in similar communities around the country.

Recommendations for alleviating unfavorable conditions in this area will not be released at this time, since further analysis is to take place.

A total of 5,647 units are listed as deteriorating in the city, or 12.9 per cent of the total. A total of 1,361 units, or 2.1 per cent, are listed as dilapidated.

Most of the poor structures lie in older neighborhoods and are multi-family dwellings.

The problem of aging structures is a major one, the housing committee notes, since 65.9 per cent of existing dwellings in Erie County are over 20 years of age.

There are 3,315 uninhabitable dwelling units (4.3 per cent) in the county. Of this total, 605 are within the city, according to the report.

Experience has shown and logic dictates that most housing code violations are found in older homes.

Undeveloped land acreage within the city is rapidly vanishing, the report notes, and at present consumption levels will be gone by 1975.

This means that, unless there is a shift from one-family to multiple-family and high rise apartment housing, population growth will be curtailed in the city and upper and middle income families will continue their exodus to the suburbs.

Millcreek township alone has had a 464 per cent population increase since 1930, for example.

The housing committee is part of a massive study to determine Erie's health and environmental needs up to the year 2000. In pointing to needs for better housing, the committee notes the following:

Though slum and blight areas within the city represent only 18.7 per cent of the total housing area, they account for 63 per cent of all tuberculosis and venereal disease, 49 per cent of adult and juvenile crime, 36 per cent of secondary school dropouts, 28 per cent of all fires, and 36 per cent of the total number of dilapidated and deteriorating units.

A major factor contributing to housing problems, according to the report, are the inability of property owners to secure property repairs because of poor credit ratings. Many families in poor housing areas earn less than $3,000 per year.

Other factors are previous lack of housing regulations, lax zoning measures, general neighborhood decline, absentee ownership and a change from owner-occupied neighborhoods to transient type housing area.

COURTHOUSE

Major Dilemma: New Landfill Site

By GARTH MINEGAR

A closely-guarded report to commissioners this week sets a must date of July 1 for the acquisition of a new landfill site for refuse disposal, most of it non-combustbles from the city incinerator.

MINEGAR

"If we don't find a site by July 1, we will soon be knee deep in garbage, and government officials will have to use the right of eminent domain to solve the problem," according to the statement.

It came from the Solid Waste Committee of the Erieland 2000 environmental health study group.

Commissioners have proposed a joint city-county refuse disposal study to pinpoint how to solve the problem, and have the support of Mayor Louis J. Tullio.

It is up to City Council and commissioners to find the funds, and for the county that's no problem — it's a major dilemma.

The committee says the problem of what to do about solid waste collection, such as garbage and rubbish, and disposal, has been with us for the past 10 years, and the increased volume has placed a strain on the already inadequate disposal methods.

It says the city incinerators are in need of updating and major overhaul.

"The inability of landfill operators to get property for refuse disposal will be a major problem in about two months.

"We need several hundred acres now for this type of disposal, or about one acre for each 10,000 residents each year," according to the report.

The committee members cite lack of understanding of what a landfill is supposed to accomplish as a major cause of the shortage.

"People think of it as a dump, and do not realize all refuse is covered with dirt. Landfills have been used effectively to reclaim waste areas for use.

"Communities are actively working to zone out this type of disposal without understanding how it can be effectively used for their benefit."

Commissioners may or may not have taken a long look at this report, but it is expected the county will have to make a move on its own shortly, or in conjuction with the city.

A temporary measure like land acquisition is going to have to fill the gap, until a disposal study is approved and finished, and recommended facilities provided.

The county can operate various types of disposal services, according to Solicitor John M. McLaughlin.

The major benefit would go to the city — since 50 tons of non - combustible material is hauled from the city incinerator each day to a landfill.

The committee labels the vehicles of the city's licensed refuse collectors as "poor," and the service, "poor and expensive."

Of six private landfills operating in the county, only one operates on an economical level, according to the report, while five cannot provide adequtea equipment and labor to satisfy public health criteria, "yet sites must be available for both city and county refuse."

If there is any doubt about the magnitude of the problem, the committee provided officials with these statistics:

The present population in Erie produces 285 tons of refuse each day now, and this will be 464 tons by 1985.

Residents of Millcreek and Harborcreek daily account for 32 and 12 tons, and this will increase in 20 years to 53 and 20, while the remainder of the county accounts for 268 tons a day in 1985.

The county will have to spend some money this year to ease the situation, and the 1966 budget cannot provide it.

PHASE I

CONFERENCE ON PLANNING FOR ENVIRONMENTAL HEALTH

PURPOSE

This conference is designed to evaluate health-related services and facilities (water, garbage, etc.) from a planning standpoint. As a result of this orientation, conferees should be able to provide their communities with a better view of the factors contributing to environmental health. Its goal is that you and your family and your community will have the benefits of a healthful environment now and in the future.

AGENDA

September 30, 1965

MORNING PROGRAM

CHAIRMAN: Christopher Capotis

8:15	Registration	
8:45	Welcome and Objectives of Conference	Norman E. Tucker
9:00	Planning	Louis Lex, Jr.
9:30	General Sanitation	Edward Stockton
10:00	Coffee Break	
10:20	Recreational Sanitation	Michael J. Wargo
10:50	Panel Discussion Questions and Answers	
12:00	Luncheon	

MASTER OF CEREMONIES: F. S. Shubert, M. D.

Keynote Address: Callis Atkins,
Assistant Surgeon General, U. S. P. H. S.

AFTERNOON PROGRAM

CHAIRMAN: Charles Reeves

1:00	Housing	Francis A. Jacocks
1:30	Air Pollution	Victor H. Sussman
2:00	Sewage	Gerald L Brask
2:30	Solid Waste	Ralph J. Black
3:00	Panel Discussion Questions and Answers	
3:15	Summary	Norman E. Tucker
3:30	Adjourn	

PROGRAM PARTICIPANTS

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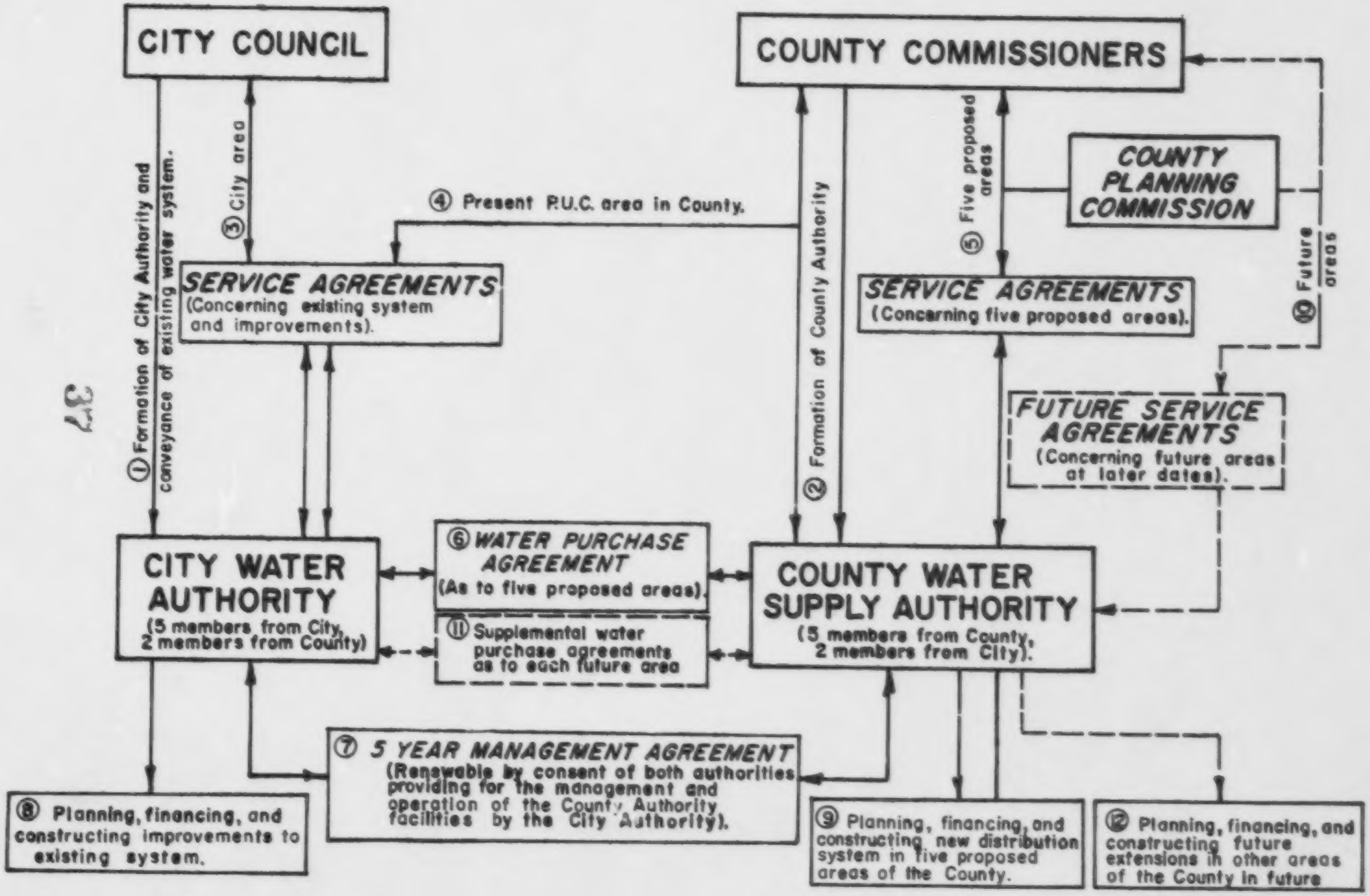
PHASE II

DATA GATHERING AND CATAGORICAL REPORTS

WATER
LIQUID WASTES
SOLID WASTES
AIR POLLUTION
HOUSING
RECREATION
GENERAL HEALTH
PLANNING

WATER

SCHEMATIC DIAGRAM OF LEGAL AND FINANCIAL PROCEDURES


CITY COUNCIL
COUNTY COMMISSIONERS
COUNTY PLANNING COMMISSION
① Formation of City Authority and conveyance of existing water system.
③ City area
④ Present P.U.C. area in County.
② Formation of County Authority
⑤ Five proposed areas
⑩ Future areas
SERVICE AGREEMENTS (Concerning existing system and improvements).
SERVICE AGREEMENTS (Concerning five proposed areas).
FUTURE SERVICE AGREEMENTS (Concerning future areas at later dates).
CITY WATER AUTHORITY (5 members from City, 2 members from County)
⑥ WATER PURCHASE AGREEMENT (As to five proposed areas).
⑪ Supplemental water purchase agreements as to each future area
COUNTY WATER SUPPLY AUTHORITY (5 members from County, 2 members from City).
⑦ 5 YEAR MANAGEMENT AGREEMENT (Renewable by consent of both authorities providing for the management and operation of the County Authority facilities by the City Authority).
⑧ Planning, financing, and constructing improvements to existing system.
⑨ Planning, financing, and constructing new distribution system in five proposed areas of the County.
⑫ Planning, financing, and constructing future extensions in other areas of the County in future

ERIELAND 2000

WATER COMMITTEE

INTRODUCTION

Erie County is located in the northwest corner of Pennsylvania. The County is unique geographically, in that it is the only County bordering on a large body of fresh water, Lake Erie. The Lake is the major source of water for the County as it serves as the supply for the City of Erie, which has about one-half of the population of the County.

Both agriculture and industry are well established in the County. A wide agricultural belt parallels the lake shoreline and also extends into the other rural areas of the County. Industry is mainly concentrated in the City of Erie, predominating in the lakefront area, and in the municipalities surrounding the City.

EXISTING FACILITIES

There are fourteen public water supplies and several small cooperatives presently serving Erie County. The largest of these systems is that of the City of Erie, which in 1965, served a population of about 185,000 people. The total population served by all of the public systems is approximately 210,000 out of the total County population of about 250,682. The existing public water supplies are listed in Table 1.

TABLE 1

Albion Municipal Water Works
Edinboro Municipal Water Works
Fairview Water Authority
Girard Municipal Water Works
Lake City Municipal Water Works
North East Municipal Water Works
Union City Municipal Water Works
Waterford Municipal Water Authority
Lake Shore Association
Westminster Water Company
Asbury Water Company
Ridgeville Water Company
Corry Water Company
Erie Municipal Water Works

POPULATION

Population projections by the Erie County Planning Commission are as follows:

	1960 Census	1975	1990
Erie City	138,440	148,000	146,500
Suburbs*	46,947	70,000	128,500
Urban Area	185,387	218,000	275,000
Erie County	250,682	294,200	383,000

*Harborcreek, Lawrence Park, Millcreek, Wesleyville.

By the year 2,000 it is expected that major development will have occurred in the municipalities surrounding the City of Erie, especially in Harborcreek and Millcreek Townships, with urban growth beginning to spread into Summit Township. It is expected that by 1975, all of the available vacant land within the City of Erie, Lawrence Park, and Wesleyville will have been developed; over 2,000 acres in Millcreek Township will have been added to the urbanized area, and an additional 500 acres in Harborcreek will have been used. From 1975 to 1990, 3,000 more acres in Harborcreek. Most of this development will be for single family homes, a relatively low-densities of two to four families per acre or less.

WATER QUANTITY

The principal source of water supply in the County is Lake Erie, although the small public and private water systems depend upon either shallow dug wells or drilled wells as their source of supply. As the urban development of Erie County continues, it is quite possible that the demand for water will increase in the areas served by wells, to the point where they will be inadequate to meet the increased demand. This will increase the reliance on Lake Erie as the primary source of supply.

Approximately 1,000,000 acre ft. of water is available to the County for ground water recharge and storage each year. At present, Erie County's annual consumption of water is at a rate of 58,400 acre ft/year. The U. S. D. A. Soil Conservation Service, in an unpublished report, estimates that by 1985 Erie County's consumption of water will be 146,000 acre ft/year. As the urban population expands, it is expected that the demand for agricultural water will decline and that the increase per capita consumption of water will rapidly outstrip the normal recharge rate of the ground water. This expectation poses a questionable future for existing well systems.

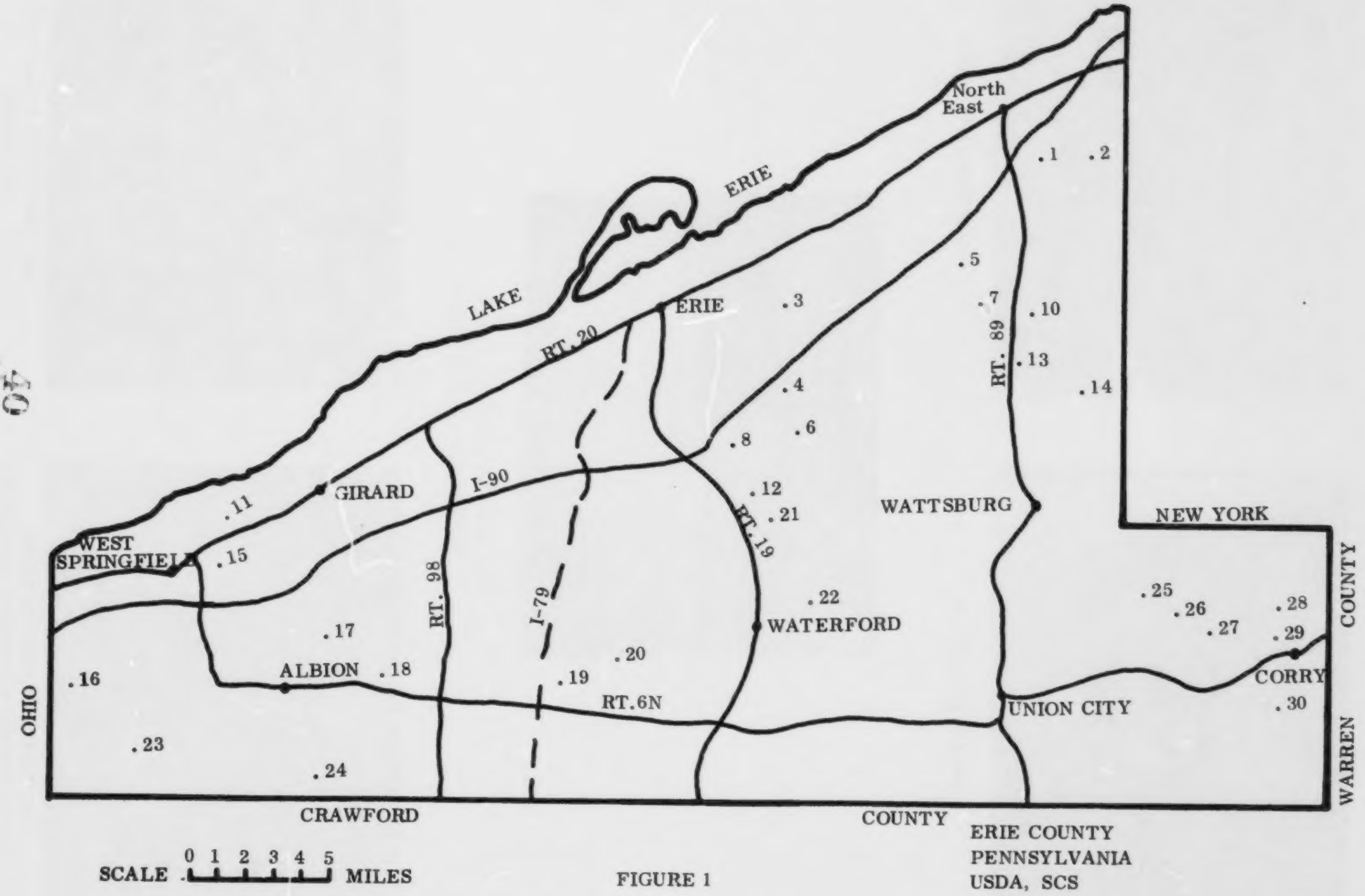
In a water resource study made by the U. S. D. A. Soil Conservation Service to aid in ground water recharge and storage, thirty impoundment sites of fifty or more surface acres were located. These thirty sites have a surface area of 6,800 acres, a storage area of 130,000 acre feet, and a recharge area of 2,600,000 acre feet of high quality water. All but four of these sites are over 1,000 feet above sea level. The Soil Conservation Service recommends that these sites be included in a County water plan and that they be protected from encroachment by acquisition or zoning. These sites are given in Table 2 and Figure 1.

TABLE 2

POTENTIAL WATER STORAGE SITES - ERIE COUNTY

Site Location	Watershed Area (Sq. Mi.)	Watershed Area (Acre)	Storage Surface Acres	Storage Acre Feet
1-Sixteen Mile Creek	1.4	874	77	1,040
2-Sixteen Mile Creek	1.8	1,328	92	690
3-Six Mile Creek	15.1	9,635	222	11,650
4-Six Mile Creek	5.8	3,800	79	1,580
5-Twelve Mile Creek	0.5	299	60	900
6-Six Mile Creek SGTL	5.1	3,264	190	6,840
7-Unnamed Branch-Colts Station	8.3	5,340	138	2,484
8-Four Mile Creek	5.3	3,420	83	1,971
9-Townley Run at Hornby	1.2	792	138	2,208
10-West Branch French Creek	20.0	12,800	800	9,600
11-Crooked Creek	16.6	10,630	81	1,132
12-Four Mile Creek	3.6	2,290	124	3,100
13-Bailey Run	3.7	2,366	132	2,772
14-Unnamed Branch-Weeks Valley	3.7	2,365	207	5,589
15-Raccoon Creek	4.5	2,885	164	1,638
16-Astabula Creek	4.0	2,582	516	3,100
17-Little Elk Creek	6.0	3,838	98	1,700
18-Lundys Lane	4.0	2,560	92	1,656
19-Above Edinboro Lake	6.2	3,960	954	19,080
20-Little Conneautte Creek	8.1	5,200	349	8,668
21-East Branch LeBouef Creek	19.9	12,720	340	4,760
22-Wheeler Creek	2.1	1,370	162	2,915
23-West Branch Mud Run	26.8	17,100	292	5,840
24-Temple Creek	6.8	4,360	64	710
25-Slaughter Run	4.1	2,618	193	3,478
26-Naskin Run	2.6	1,680	50	900
27-Spencer Creek	2.4	1,525	99	2,376
28-Hare Creek	10.0	6,050	199	1,192
29-Bear Creek Peat Bog	1.7	1,100	218	872
30-South Branch French Creek	5.8	3,700	586	18,752

There are numerous sites under 50 surface acres. Information will be provided upon request.


LAKE
ERIE
North East
ERIE
RT. 20
I-90
I-79
RT. 98
RT. 19
RT. 89
RT. 6N
WEST SPRINGFIELD
GIRARD
ALBION
WATERFORD
WATTSBURG
UNION CITY
CORRY
NEW YORK
WARREN COUNTY
OHIO
CRAWFORD COUNTY
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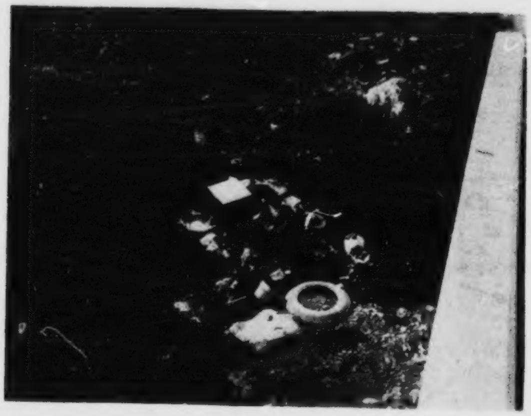
SCALE 0 1 2 3 4 5 MILES
ERIE COUNTY
PENNSYLVANIA
USDA, SCS

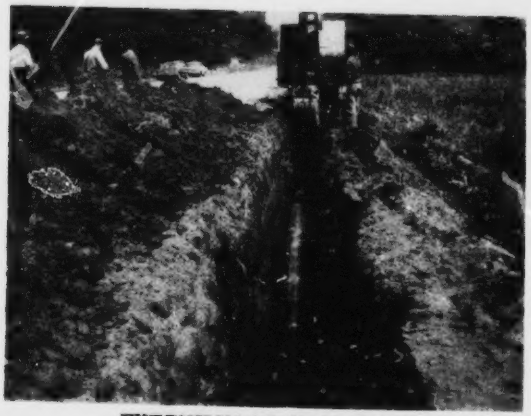
FIGURE 1



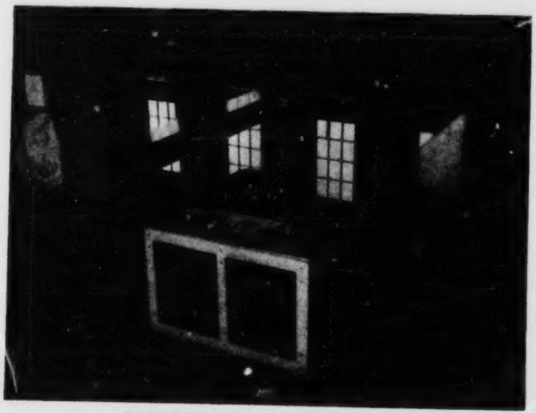
POLLUTED STREAM

POLLUTED LAKE SHORE

SAFE WATER FROM WELL
SERVING SMALL SUBDIVISION



EXTENSION OF CITY OF ERIE'S
WATER SYSTEM TO COUNTY RESIDENTS



MODERN WATER TREATMENT
FACILITIES

Present problems of supply in Erie County are evident; in the lack of adequate water and pressures in the small water supplies; sprinkling hours in the city supply; the unnoticed small additions to public supplies outside the metropolitan area; and the increasing number of subdivisions wishing to install systems of their own. Some of the supply problem could be eliminated by the installation of water meters on all customer connections. With meter connections, less water would be wasted, allowing additional supply to meet peak demands; the operating cost of the treatment plant would be reduced through the lowered consumption; and those using the water would pay their fair share.

A study prepared for the Erie County Planning Commission by the Chester Engineers dated October, 1964, deals with the development of a metropolitan water system to serve the present and anticipated urbanized portion of Erie County. This area includes the City of Erie, the Boroughs of Wesleyville, Fairview, Girard, Lake City, and Middleboro, and the Townships of Harborcreek, Lawrence Park, Greene, McKean, Summit, Millcreek, Fairview, and Girard. The system developed in the study, uses Lake Erie as the source of supply. For further details of this study, reference should be made to the Chester Engineers reports, Study and Development of a Metropolitan Water System, October, 1964, and Metropolitan Water System, Method II. Also, Report of the Erie City-County Technical Water Advisory Committee, *May 1966.

WATER QUALITY

Good sanitary engineering design necessitates treatment of all public water supplies to insure that a safe potable water is served to the consumers. For some well supplies, only chlorination is required, but for others and for all surface supplies, coagulation, sedimentation, filtration, and chlorination are required. In addition, some supplies need special treatment to remove specific contaminates.

A major health problem in Erie County is the number of individual wells in areas not served by public sewerage facilities. Erie County has less than 10,000 acres of soil on which sewage effluent disposal will not become a problem as the population increases. On the remainder high water table, water table pollution, and high clay and silt content will limit their use for concentrated on-site sewage disposal during the winter and spring months. These conditions have already polluted individual home wells in areas being highly developed and this problem can be expected to increase in the future as pollution of the ground water increases.

High concentrations of chlorides in wells in areas of Greene, Summit, and Millcreek Townships have caused some wells to be abandoned. In the future, it is expected that more wells will have to be abandoned as the chlorides permiate through the ground water table and population densities increase.

SYNOPSIS OF THE WATER PROBLEM

In a report entitled "Inventory of Regional Utilities," prepared by the County Planning Office and published in 1961, a thorough analysis of existing sewerage and water systems was assembled which included all municipalities in Erie County.

Basically, the Regional Utilities Study revealed three distinct areas of water service:

A) The Suburban area surround Erie City, which is becoming densely populated, and is in need of central water service;

B) Small communities, such as boroughs located throughout Erie County presently served by central water wells;

C) The rural areas which are entirely accommodated by individual water wells.

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*This Technical Committee was appointed by the Mayor of the City of Erie, and the Board of Erie County Commissioners to review and summarize the Chester Engineers Reports and also present a guide for action; the findings and recommendations of the Committee were published in a report form referred to above.

The Regional Utilities study further revealed that the urbanized and urbanizing area surrounding Erie City is the area that requires central water service at the present time and in the foreseeable future. The other two areas cited above (boroughs and rural) maintain an adequate water supply and will continue to do so in the future; it is the Erie urban area that is in need of a central water supply and a distribution system.

The water studies prepared by Chester Engineers for Erie County, cited elsewhere in this report, are geared and designed to fulfill the water needs in the suburban area surrounding Erie City; more emphasis will be placed on the remainder of the County when the Regional Utilities Study is revised and updated in the very near future as part of the County Development Plan.

The implementation of the Chester Engineers reports is currently in progress and barring any drastic policy changes, water service can be made available throughout the Erie urban and urbanizing area and can gradually be extended to accommodate additional development as it occurs.

There has been some lack of promptness in implementing the recommendations of the Chester Engineer Reports for a suburban water system; this is primarily due to the fact that it is difficult for the numerous legislative bodies involved to respond quickly to any given problem unless there is a very critical need; this is not to imply that the need for water service in the Erie Urban area is not urgent, but that progress made thus far in this area is reasonable when considering that the democratic form of government has traditionally been slow to act.

The recent creation of the City Water Authority, one of the recommendations included in the Chester Engineers water reports and also the Erie City-County Technical Water Advisory Committee report, is indicative that additional steps and recommendations will be implemented which will gradually lead to the availability of an ample water supply and a distribution system in the Erie urbanized area.

RECOMMENDATIONS

1 That the Erie County Planning Commission Metropolitan Water System Study of October 1964, prepared by the Chester Engineers, be implemented where possible.

2 That all municipalities adopt ordinances requiring approval bv County and/or State Health Department of private and semi-public water systems within their jurisdiction.

3 That existing water systems be incorporated by acquisition, or contractual agreement, into the proposed Metropolitan System, using the existing facilities where possible.

4 That the water system be extended as soon as possible, into areas having problems with water of either insufficient quantity or poor quality.

5 That water use rates be adjusted to meet the needs of the water systems, so that the systems may operate independently of other municipal and county finances.

LIQUID WASTES

ERIELAND 2000

LIQUID WASTES COMMITTEE

Erie County supports an abundant agricultural belt along its lakeshore, dairy farming toward its southern limits, and a strong industrial base centered mainly along the lakefront in Erie and its suburbs. This wide diversity of industry, commerce, and agriculture affords an opportunity to study the handling and disposal of liquid wastes in Erie County for application in many other parts of the Nation.

Erie County is endowed with plentiful rainfall and an excellent water supply. The land drains into two natural drainage basins: the land along the southern lakeshore drains into Lake Erie to eventually become a part of the St. Lawrence River drainage basin; the remaining land drains southeasterly into the headwaters of the Allegheny River to eventually become a part of the Allegheny-Ohio River Basin. Any liquid waste discharged in the county might therefore enter either water shed, but because the bulk of the population and industry is centered along the lakeshore area, the major portion of the liquid wastes ultimately flows into Lake Erie.

Under the direction of the Pennsylvania State Water Board, a proper liquid waste treatment and disposal program has been actively pursued in Erie County. Conditions in Erie County reflect the long time application of rules and regulations on liquid waste discharge. Although much progress has been made, there still exists a limited number of problem areas where further work is required, particularly in light of the increasing requirements for high degrees of treatment.

ERIE SEWAGE TREATMENT PLANT

The areas served by the Erie Sewage Treatment Plant are: the City of Erie, Millcreek Township, Lawrence Park Township, Wesleyville Borough and part of Harborcreek Township.

Description of Plant

The Erie Sewage Treatment Plant is a modified activated sludge plant and was designed to provide intermediate treatment (70% removal of 5 day B. O. D. and 80% removal of suspended solids) for an average flow of 45. 0 M. G. D. The plant operations at the present flows of 32. 0 to 35. 0 M. G. D. have continually provided removals of 5 day B. O. D. and suspended solids of 85. 0+% and 80. 0% respectively. Operations have been improved through the installation of a sludge density meter, effluent sampling lines, all-year chlorination of the final effluent, and other plant improvements. The flows to the plan in 1965 frequently exceeded 40. 0 M. G. D. , which resulted in some decrease in over-all treatment efficiencies. The increased flows were due to the adjustments that were made by the City of Erie to the storm water overflow weirs. A program of maintenance of all siphons and overflow weirs was instituted in 1964, and will be continued on a permanent basis.

Plant Expansion

The Pennsylvania Department of Health regulations for wastes discharged into Lake Erie have become more stringent and now require complete treatment (85. 0% removal of 5 day B. O. D.) for any wastes that are discharged into Lake Erie.

The recreational aspects of Erie County give further cause for pollution control activities. Presque Isle State Park and the surrounding area have made tourism a very significant part of the Erie economy. In addition, commercial fishing--once an important business in the Erie area--has declined drastically. Pollution controls on the lake could have changed this picture. These factors make Erie County residents and officials particularly aware of the problems of pollution and of the benefits of good quality water.

TABLE I

PACKAGE SEWAGE PLANTS IN OPERATION

Larry's Economy	North East Township
Stouffer's	McKean Township
Green Shingle Restaurant	McKean Township
Terrace Restaurant	Fairview Township
Talarico's Truck Stop	Springfield Township
Clark School	Harborcreek Township
Behrend Center (Penn State)	Harborcreek Township
Robison School	Summit Township
Fairview High School	Fairview Township
White Sewing Machine Company	Fairview Township
Howard Johnson	Summit Township
Holiday Inn-South	Summit Township
Presque Isle Boat Marina	Presque Isle State Park
Erie County Hospital	Fairview Township
Rondale Nursing Home	Summit Township
Carney's	Fairview Township
Travelers' Inn	Summit Township
Greenbriar*	Fairview Township
Pure Oil	North East Township
Klein School	Harborcreek Township
Greene Township School	Greene Township
Paschke Restaurant	North East Township
Gospel Hill Subdivision**	Harborcreek Township
Lake Shore Country Club*	Fairview Township
Kahkwa Country Club	Fairview Township
County Tech-Vocational School**	Summit Township
Gen. McLane High School	Washington Township
Wilson**	North East Township
Presque Isle State Park Beach #1-2**	Presque Isle State Park
Presque Isle State Park Beach #8**	Presque Isle State Park

* Under Permit
**Plans Prepared

PUBLIC SEWERAGE DISPOSAL SYSTEMS

- Albion Boro
    - Cranesville Boro
- Lake City Boro
- Girard Boro
- Edinboro
- Waterford Boro
- Union City Boro
- City of Corry
- North East Boro
- City of Erie
    - Millcreek Township
    - Lawrence Park Township
    - Wesleyville Boro
    - Harborcreek Township

INDUSTRIES UNDER PERMIT TO S. W. B.

- Gunnison Bros. Tannery
- International Pipe and Ceramics Corp.
- American Sterilizer Company
- Interlake Iron Corp.
- Hammermill Paper Company
- General Electric Company
- Welch Grape Juice Company
- Jerry Quirk - Gravel Washing
- Corry - Jamestown Corp.
- Eruite Corp.
- Pennsylvania Electric Company
- J. McCormick Construction Company

SEWAGE LAGOON

Georgetown Heights Subdivision,
McKean Township

SEWAGE CORRECTIONS NEEDED

- Girard Boro Sewage Plant
- Gunnison Bros. - Girard Township
- Lake Shore Subdivision - Fairview Township
- City of Erie (trunk sewers)
- Interlake Iron Corporation - Erie
- Hammermill Paper Company - Erie
- Edinboro Sewage Plant
- Middleboro
- Beachcomber - Millcreek Township
- Greene Township
- Brookside - Harborcreek Township
- Fairfield - Harborcreek Township

PROPOSED PACKAGE PLANTS

Parker White Metal	Fairview Township
Harris Development	Harborcreek Township
St. Boniface School	Greene Township
St. Matthews-in-the-Woods	Summit Township
Summit Central	Summit Township
Highway Garage	Summit Township
Greenfield Twp. School	Greenfield Township
Mill Village School	Mill Village
Fairview-Girard School	Fairview Township
Aquarama	Millcreek Township
Rolling Ridge School	Harborcreek Township
Erie Register	McKean Township

SEWER MAIN EXTENSION

SEPTIC TANK OUTFALL

MODERN SEWAGE DISPOSAL PLANT

PRIVIES

This chapter of the Erieland 2000 study covers the various ramifications of different liquid wastes which may be discharged into the streams and lakes and recommends action which may be required to control the effects of pollution. It also discusses the present enforcement power available to state and local government agencies and the need and sources of money to install the treatment facilities which are needed now and will be needed in the future.

SANITARY WASTES

The handling of sanitary wastes can best be discussed by considering separately the areas served by the City of Erie sewage treatment facilities and the rest of the county. In general, the urban area of the City of Erie is connected to the city treatment plant. In the county, a variety of treatment approaches are used, including small municipal plants, package treatment plants and on-lot disposal systems utilizing septic tanks.

The Erie Sewer Authority has made an application for Federal funds to help defray the costs of the expansion of the treatment facilities and to make revisions to the interceptor sewer system that will reduce some of the high water weir overflows into storm sewers and divert most wastes to the treatment plant.

The expanded treatment facilities will provide complete treatment (85 % removal of 5 day B. O. D. and 90% removal of settleable solids) for an average flow of 53. 0 M. G. D. in the year 1985. The cost of the expanded treatment facilities and interceptor sewer revisions will be 2. 5 to 3. 0 million dollars. A substantial amount of Federal funds will be needed to make the project feasible.

Projected Flows and Population

Year	Connected Population	Sewage Flow M. G. D.
1965	166, 300	35. 0
1975	212, 700	45. 0
1985	254, 000	53. 0
2000	305, 000	64. 0

Bay Front Sewers

The City of Erie has made an application for Federal funds for plans to construct a bay front sewer system. This system would serve properties not presently connected to the public sewers in the bay front area. The estimated cost of this project is $1, 000, 000.

Industrial Wastes

An industrial waste survey was completed in 1965 for the City of Erie by their consulting engineers. Some of the industries that discharged untreated industrial wastes into storm or sanitary sewers, are now required to pre-treat and discharge their wastes into the city sanitary sewer system. Other industrial firms have employed consulting engineers to design treatment facilities which will be constructed before permission can be granted to discharge wastes into the city sewer system. When the construction of these facilities has been completed, the treated effluent will then be discharged into the city sanitary sewer system or storm sewers.

Industrial wastes surveys will be continued on a permanent basis by the City of Erie. This will prevent any, or most, illegal dumpings which may prove to be detrimental to aquatic life or recreational facilities.

Combination Sewers

The over-all cost of separating the combined sewers within the City of Erie would exceed $22, 000, 000. The high cost of this program prohibits complete separation of combined sewers at this time. Presently, however, separations are being made in the urban renewal programs of the city.

CERTIFICATION

Providing the best in equipment and facilities for the treatment of sewage does not insure proper treatment. When the equipment has been placed in service, it is the plant operator who must make the decisions on the operation of the plant. With the great variability in incoming sewage, there are many opportunities for upsets and the operator must have the skill and "know-how" to cope with the problems.

The larger municipal sewage treatment plants are usually operated by trained, competent personnel. Unfortunately, this is not always true and is the exception with package plants. Usually the operation of the package plant is assigned as a part-time chore to maintenance or janitorial personnel. Even though the package plants have been designed to be automatic, they need frequent checking and adjusting. With untrained personnel their operation may provide only limited treatment.

A training program has been established by the Pennsylvania Water Pollution Control Association for operators of sewage plants of all sizes. Training is provided in all phases of sewage plant operation. The students are drawn from sewage plant operators and workers in surrounding areas. After satisfactory completion of the courses and a written examination given by the Voluntary Certification Board, regular and temporary certificates are issued. The type of certificates issued depends on educational, training, and experience qualifications. The certificates specify the maximum capacity and type of sewage treatment plant which the holder is qualified to operate.

This voluntary certificate program has as its objective, the improvement of waste treatment plant operations and the provision of maximum treatment efficiency for stream pollution control.

Pennsylvania has had a voluntary certification program since 1954. Although this has stimulated operation interest, over half the waste treatment plants are operated by unqualified operators. Many operators will seek to be qualified only when required to do so. Mandatory certification will achieve the complete coverage needed to get all plants under qualified supervision.

Mandatory certification will:

1. Provide standards for employing operators.
2. Define goals for operators who plan for advancement.
3. Require operators to comply with requirements.
4. Stimulate and offer training programs to improve operator qualifications. The improvement of operator qualifications will provide maximum operating efficiences of the waste treatment plants and will control or prevent pollution of streams.
5. Enable qualified operators to save money on operations by efficient use of chemicals, power, maintenance.

CONCLUSIONS

1. The proposed expansion of the Erie sewage treatment plant facilities to provide complete treatment (90% removal of 5 day B. O. D. and suspended solids) for a design flow of 53. 0 M. G. D. in the year 1985 should be approved.
2. The treatment plant to treat industrial waste within reason after the waste has been properly pretreated.
3. The proposed permanent program for the industrial wastes survey to be set up to eliminate most of the industrial wastes dumpings that could be detrimental to aquatic life or recreational facilities.
4. A master plan to be developed and implemented for step-wise separation of combined sewers.
5. Certification of treatment plant operators to be mandatory.
6. A master plan for sewer extension throughout the metropolitan area to be developed and used as a guide for the future growth of Erieland.

TREATMENT OF WASTES IN OTHER ERIE COUNTY AREAS

While 82% of Erie County's sewage is treated in authorized public sewerage systems, some 18% of the population is without public sewers. Most of the 18% live in clay soil areas and there are variations in the degree their sewage causes a problem. The more congested the area, the worse the pollution problem.

The map included in the appendix shows the location of the municipal sewage treatment plants and the package treatment plants in Erie County. The tabulation which follows the map presents data on existing municipal treatment plants and attempts to project population and sewage growth to the year 2000

Until recently, the Pennsylvania Department of Health operated on recommended standards for on-lot sewage disposal and could not do a thing if a substandard system was installed. Their only recourse (as was the County Health Department's) was to wait until the system malfunctioned. Then a weak public health nuisance law could be invoked -- after the damage was done. The failure to pass a county-wide, on-lot sewage disposal ordinance several years ago, and mediocre enforcement of local township ordinances, still allow the installation of individual on-lot sewage systems on property not suitable for same.

The County Health Department's function in the on-lot sewage disposal problem is to:

A. Give advice on percolation tests and advise on proper installation of individual disposal systems.

B. Promote the passage and enforcement of local on-lot sewage disposal and subdivision ordinances.

C. Pass on all installations of on-lot disposal systems for FHA and VA loans according to rigid FHA standards.

D. Use the General Health Nuisance Regulations when possible or appropriate, to obtain correction to defective systems.

E. Assist local political subdivisions to evaluate sewage systems and make recommendations concerning same.

FINDINGS

1. Sewage flows to ditches in a number of areas in the county because of the lack of public sewers and because of the lack of enforcement of existing on-lot sewage disposal ordinances. In these areas clay soil is usually the cause of the problem. Several schools also lack proper sewage disposal systems.

2. As sewage systems are allowed in substandard soil, pollution problems grow-- with community growth, demands for sewers grow, then become a reality. Because of this, Millcreek Township, in the past six years, has spent over six million dollars in two separate bond issues for the construction of sewers. Millcreek Township officials should be complimented for their efforts in moving ahead on these two occasions to solve a serious community problem. Other political subdivisions are encouraged to make the same effort. Enforcement of local ordinances could have:

   a. Forced building on lots where sewers existed.

   b. Forced subdividers to extend sewers to their areas.

   c. Forced subdividers to install interim package plants until the main or trunk sewers were built.

   d. Made the home owner or business establishment pay for sewage disposal once instead of twice.

   e. Eliminated much sewage from yards, ditches, and streams.

3. There is some variation in local ordinances as to size of tanks, conditions under which systems can be installed, lot sizes, etc., which present some difficulties to installers and the health department.

4. The Pennsylvania Sanitary Water Board and the Department of Health did not want to authorize until recently, individual discharges of treated waste to waters of the Commonwealth, unless each discharge request was accompanied by an engineering report. As a result, few individual systems, such as sand filters, were constructed in this area. While sand filters are frowned on as a means of treatment, they may in clay areas be the only substitute for a difficult and costly treatment process. A new state procedure now makes it possible for the individual householder to obtain a Sanitary Water Board permit for waste discharge to a receiving stream if proper treatment processes are used. An engineering report is not required.

CONCLUSION

1. Public sewers must be extended into areas where it is economically feasible. The program for the construction of interim package sewage plants must also continue until such time as public sewers become available.

2. The enforcement of on-lot sewage disposal ordinances now is effect should be stressed so that ground amiable to the disposal of liquid waste will be used and ground not suitable to disposal will not be used.

3. The recently passed state law relative to on-lot sewage disposal should be implemented quickly by the State Health Department. In turn, the County Health Department must also adopt same so that uniform on-lot disposal standards will prevail throughout the County.

4. Since new state regulations allow individual homes to discharge waste to receiving streams, the means of doing same should be made known to the political subdivisions throughout the county. This means of disposal should be used only in areas where percolation rates are poor.

INDUSTRIAL WASTES

Description of Erie County Industry

Industry in Erie County is widely diversified, with approximately 451 different plants employing about 45,000 people. It is estimated that Erie County is the third ranking area in the United States in diversity of industry. Products in over 100 different classifications are produced for sale throughout the world. The principal industrial enterprises are engaged in the manufacture of metals and metal products, including electrical equipment. Other important products are pulp and paper, beer, toys, plastic products, and electronic components.

Many of the industrial operations in the county and city have essentially no industrial waste discharge. Others are potential contributors of industrial wastes, which require some form of treatment. The treatment requirements vary greatly, depending on the composition of the wastes. Many of these can be handled in conventional sewage treatment plants after some preliminary pre-treatment. Other wastes are so specialized that they require special technology and installations for their treatment.

Industrial Wastes--Metropolitan Erie

The metropolitan Erie city area includes about 290 industries and commercial establishments, most of which are small, employing fewer than 100 persons each. About one-half of the total county's manufacturing production stems from manufacturing within the city boundaries.

The manufacturing community in metropolitan Erie has recognized its responsibility for solving the problems that produce some form of undesirable liquid waste. The basic approach has been to work with the city department of sewers so that industrial wastes may be discharged and treated in the Erie city sewage treatment plant. This effort has been channeled through the Manufacturers Association of Erie acting through the Industrial Waste Committee of the Association.

Industrial Wastes--Erie County

A number of the industries, located in the county but adjacent to the city, are connected to the Erie sewage system. Other industries located in the county do not have any liquid waste discharge and so present no problems in this area.

There are 13 industries which have significant industrial waste discharges and are therefore under the purview of the Pennsylvania Sanitary Water Board. These industries represent many activities including food processing, tanning, laundry, metal working, paving, stone and clay, and machinery production. Most of these industries are located on tributaries which drain into Lake Erie.

Eleven of these plants provide complete treatment of their wastes. One provides less than primary treatment and one provides no treatment. Ten of these are in compliance with the regulations and permits issued by the State Sanitary Water Board. Two others are making satisfactory progress, although not in compliance yet. One is in actual violation and is not making satisfactory progress. The Sanitary Water Board is taking steps to correct this situation so that all industry in Erie County will be either in compliance or making satisfactory progress toward compliance with the state regulations.

RECOMMENDATIONS

Much progress has been made in the treatment of industrial wastes in Erie County. This has been the result of close cooperation between the various governmental agencies involved and the individual industries. There are still areas where improvement can be made.

The following points are recommended for further study and action:

> In certain specific areas, the necessary technology does not exist for treatment and/or abatement of the industrial wastes. Therefore, increased research and development should be devoted to these areas. Applicable technology should be used now when economic to achieve partial reduction of waste loads.

A comprehensive survey of industrial wastes originating within the city, was performed by the city consulting engineers in 1965. They found that the majority of industrial wastes are discharged to the city sewage treatment plant. The plant is able to accept and treat these wastes under normal conditions without any upsets. Thus these wastes receive complete treatment as defined by the Pennsylvania Department of Health. The industries which are not discharging to the city sewer system but to the streams which drain into the Erie Harbor or Lake Erie are proceeding with installations to either connect to the city sewage system or to treat their own wastes.

The capacity of the city sewage treatment plant is such that it should be able to handle reasonable increases in waste load from industry. Future increases which may be required in the sewage treatment plant to handle increased domestic sewage will probably be sufficient to handle increases in industrial wastes.

In addition to surveying industrial waste discharges in the City of Erie, the city consultants recommended an ordinance which has been adopted, regulating the discharge of industrial wastes. This ordinance spells out the conditions and characteristics of the waste which may be discharged and establishes a schedule for the cost of treatment to the particular industry. It will also provide a uniform and clear approach toward the combined treatment of sanitary and industrial wastes in the city sewage treatment plant. A copy is included in the appendix.

It is apparent that the combined treatment approach and the cooperation that exists between the city department of sewers and industry, working through the Manufacturers Association, provides an excellent basis for avoiding deleterious discharges of industrial wastes to the streams and ultimately to Lake Erie. The particular problems remaining to be solved, are being aggressively attacked by the various manufacturing plants involved, working in close cooperation with the Sanitary Water Board through its local representatives.

1. Every effort should be made by those industries not in compliance with the regulations of the Sanitary Water Board, or the attached City of Erie ordinance, to install the necessary waste treatment facilities.

2. Since Lake Erie is of such importance to Erie County, both as a water source and as a source of income, the work involved in improving Lake Erie (as outlined in the Public Health Service Conferences held in 1965) should be accelerated and supported with substantial Federal funds.

3. Industry should make every effort to avoid accidental discharges of industrial wastes which can cause fish kills and intermittent pollution.

4. Any future construction or expansion of municipal sewage treatment plants should, within reason, include provision for handling industrial wastes generated within the area served by the treatment plant.

5. Every effort should be extended by government bodies and industry, to continue the close cooperation that has existed in the past. This will permit faster solution of problems which will arise in the future.

Commercial and Sport Fishing

The commercial fishing industry operating out of Erie County has been greatly altered by changes in conditions in the waters of Lake Erie. These changes exist not only in the vicinity of Erie County, but in the entire lake, and were the subject of Public Health Service Conferences in 1965.

The effect on the water adjacent to Erie County has been serious, but less drastic than in the rest of the lake. The relatively clean streams which drain from Erie County have served to create a pocket in Lake Erie adjacent to the county which will support a large fish population than most of the rest of the lake. Thus, Erie County still has commercial fishing activities although the rest of the lake is virtually void of commercial fishing.

Commercial Fisheries - Pennsylvania Waters of Lake Erie

The commercial catches of fish from 1955 to and including 1965, show the population decline in certain species and the changes in population of other species. These figures are taken from the Summary of Commercial Fisheries Catches, Pennsylvania waters of Lake Erie.

(CATCH IN POUNDS)

1955	BLUE PIKE	WHITE FISH	CISCO	YELLOW PERCH
1955	2,290,140	153,475	12,987	289,939
1956	1,260,936	297,538	50,319	442,665
1957	663,880	493,328	13,339	542,168
1958	75,531	96,906	4,686	633,843
1959	4,631	18,885	5,697	832,886
1960	379	5,726	4,377	762,844
1961	112	1,992	1,316	1,081,537
1962	512	1,140	334	2,041,913
1963	50	5,470	107	1,061,993
1964	16	1,961	214	312,641
1965	43	67	0	474,354

	WALLEYE	WHITE BASS	SHEEPSHEAD	CATFISH
1955	21,146	172,618	9,096	727
1956	11,546	99,276	7,705	698
1957	49,872	51,954	8,272	3,128
1958	83,294	19,575	29,009	3,546
1959	93,145	68,857	45,567	2,121
1960	6,727	196,979	11,070	949
1961	21,984	105,393	26,253	1,271
1962	4,087	10,521	7,930	1,267
1963	24,058	5,969	4,220	325
1964	17,395	10,822	25,673	972
1965	30,143	3,285	4,689	1,165

A factor to be considered in the commercial catches is the number of licensed fishing devices such as Gill Nets (boat licensed), Pount Nets, Trap Nets, and Trawls in the following years:

1955 - 100
1956 - 99
1957 - 79
1958 - 91
1959 - 81
1960 0 36
1961 - 27
1962 - 28
1963 - 28
1964 - 23
1965 - 22

The previous report indicates that the deep water spawning species; blue pike, cisco, and white fish have been unable to reproduce or survive in the deep waters of Lake Erie.

Natural aging of lakes produces a variety of aquatic plants. As do all living things, these plants die. The dead plants then settle to the bottom of the lake and decompose, resulting in a reduction of dissolved oxygen. Reaeration of this zone of low dissolved oxygen water is prevented by thermal stratification of the lake. This is a natural condition in all deep bodies of water.

Because of over-fertilization of Lake Erie from domestic and industrial sources, excessive amounts of aquatic plants, mostly algae, have been produced and have greatly accelerated the natural aging process and created an unfavorable environment for deep water spawning fish.

SPORT FISHERIES--PENNSYLVANIA WATERS OF LAKE ERIE

The number of fishing licenses sold in Erie and Allegheny County (Pittsburgh, Pennsylvania) has shown a consisten decline in recent years. In other parts of the state there have been consistent increases. The decline in Erie and Allegheny Counties is felt to be the result of local and national publicity on pollution in Lake Erie.

The only specie of fish that has declined in the sport fishery, is the blue pike. Cisco and whitefish are not readily taken by hook and line. The walleye population is on the increase and is not being harvested by the sport fisherman in large numbers. This could be attributed to the belief that this population no longer exists, thus the number of walleye fishermen has decreased in the past six years. The majority of the sport fishery in the lake has been concentrated on the harvest of yellow perch and smallmouth bass.

It is claimed by the commercial fishermen that the hook and line fishermen have a greater harvest of yellow perch than the commercial catches. The value of the yellow perch sold from the commercial catches in Pennsylvania waters for 1965 was 474,354 pounds, with a retail value of $284,600.

Presque Isle Bay is stocked yearly with muskellunge, northern pike, and largemouth bass fingerling by the Pennsylvania Fish Commission and has a good population of these fish as well as pan fish and yellow perch. The yellow perch taken from the bay in the last year, have an excellent appearance and flavor, as contrasted with previous years, indicating an improvement in the waters of the bay.

Sport Fisheries - Inland Lakes and Streams of Erie County

Due siltation going into Erie County streams and lakes, it has been necessary to artificially propagate and stock game fish, such as muskellunge, northern pike, largemouth bass, and walleye to maintain a balance of predator fish population in proportion with the forage fish.

Erie County has eleven streams and one lake stocked with 29,150 adult trout yearly, with an additional 10,000 fingerling trout planted in other streams. This stocking of fingerlings in inland lakes and streams, has resulted in great improvements in fish populations and catches in the county. In the past five years there has been an annual catch of over 100 legal muskellunge in Edinboro Lake. Muskellunge, bass, northern pike, and walleye are being caught with greater frequency in the inland lakes and streams of Erie County.

The lake-run rainbow trout in the feeder streams of Lake Erie have been on the increase in the past four years. These streams are stocked annually with 6,000 adult rainbow prior to the spring opening of the trout season. The rainbow trout return from Lake Erie in the fall and spring months, and spawn as soon as the ice goes off these streams. Natural reproduction is increasing yearly. When the stocked rainbow trout were tagged, return tags came from all the states and Canada bordering Lake Erie. It is not uncommon for a rainbow trout to return in its fourth year of growth weighing 12 pounds. This rapid growth rate seems to be related to the smelt population in Lake Erie, which serves as food for the trout. This wild strain of trout could be increased greatly by stream improvements in the feeder streams. The misuse of insecticides and pesticides in the fruit belt along Lake Erie, has depleted much of the aquatic life required to support fish in some streams running into Lake Erie. Such streams cannot be stocked as there is no natural food available. In addition, natural reproduction by lake trout is prevented because the fingerlings also have no food.

FISH KILLS - CAUSE AND EXTENT

Between 1954 and 1965, there were 376,080 known fish killed in Erie County, plus an additional five ton killed in Lake Erie. The number one cause of these fish kills was tosic materials discharged by industry. Oxygen depletion caused by the decaying of organic material, both domestic and industrial, ranked as the number two cause, and misuse of pesticides was the third significant cause of fish kills.

CONCLUSIONS

1. Accelerate research to eliminate the high degree of nutrients being discharged into the waters by treated and untreated waste. In Lake Erie, multistate and international action will be required.

2. Educate farmers and others on use and misuse of insecticides, pesticides, and herbicides.

3. Educate farmers in land management and use, to eliminate heavy erosion and the siltation of lakes and streams. Stream banks should be planted with trees and vegetation. Improve practices in construction projects to prevent soil erosion and subsequent siltation.

Agricultural Residue

The eastern strip of Erie County along the shore of Lake Erie, is intensively cultivated in grapes, fruits, and vegetables. Successful growing of these crops requires extensive use of pesticides and fertilizers in order to obtain good yields of high quality produce. Not only are pesticides necessary for efficient agriculture, they are essential from a health standpoint, as the primary contaminates of food are natural filths and disease organisms which are most often spread by rodents and insects. In addition, there is extensive use of inorganic fertilizers by homeowners for lawns and gardens.

The run-off of rainfall from these areas can carry substantial amounts of both fertilizer and pesticides, resulting in stream pollution. The fertilizer stimulates the growth of algae. The effect on Erie County streams and lakes is similar to that observed in Lake Erie as discussed elsewhere in the report.

Dissolved pesticides can kill all insect and fish life in a stream, if concentrations are high. Lower concentration may kill sensitive species, changing the food cycle for fish and thus also seriously affecting the fish population.

Control of the effects of pesticides is accomplished by proper selection and handling of the materials. Adverse effects can be minimized by using materials which are not persistent and by carefully following manufacturers instructions on application.

The evidence from fish kills due to pesticides in the streams and to a lesser degree in the lake, indicates that carelessness and misuse have been responsible. A program of education of farmers is under way to drive home the harm which can be caused by misuse of the pesticides. Further education is necessary to protect against accidental spills, to instruct farmers not to wash out spraying equipment in streams, and to the use of judicious spraying. There has been some shifting to types of pesticides having a shorter residual life.

RECOMMENDATIONS

1. Proper practices should be followed to prevent excessive run-off of fertilizer. These include proper levels of application and sultivating practices to contain rainfall on the land.
2. Pesticides should be non-persistent and of the lowest possible level of toxicity.
3. Pesticide application should be carried out in strict compliance with manufacturers instructions.
4. Farmers should be instructed to avoid discharges into streams and on the proper handling of the materials.
5. Manufacturers should attempt to develop new materials which will be safer for the general public to use and will have a minimal effect on aquatic life.

LEGISLATION FOR CONTROL OF LIQUID WASTE AND STREAM POLLUTION

The Clean Streams Act

The foundation of Pennsylvania's program to control stream pollution, is the Clean Streams Act, passed in 1937 and strengthened several times since. Under this law, the Sanitary Water Board has made great progress in eliminating stream pollution from discharges of sewerage and industrial wastes. The administration of this program is the responsibility of the State Health Department.

Except where the public health is seriously endangered, procedures under the law are somewhat slow and cumbersome, but compliance is achieve eventually, if not always promptly. In our democratic society, this method is perhaps not inappropriate.

Generally speaking, the Clean Streams Act is an adequate and effective basis for the abatement and control of stream pollution.

Mass Sewerage Problems and Their Corrections

In many parts of Erie County the character of the soil is such that septic tanks and subsurface disposal systems do not operate well. Unfortunately, this fact was frequently unrecognized or ignored by homebuilders and land developers. As our population expanded beyond the areas served by municipal sewers, sanitary conditions regressed to the point where sewerage again flows in the gutters much as it did a hundred years or more ago. The solution to these problems is the installation of public sewers, and it is basically the responsibility of the residents and their municipal officials to see that this is done. Health Departments can try to persuade and educate, but seldom have the time and staff to prosecute all the individuals creating the nuisances.

The problem of malfunctioning septic tanks in suburban subdivisions cannot be easily regulated by the use of the Clean Streams Act. This is because it is sometimes difficult or impossible to prove stream pollution.

A new law called the Pennsylvania Sewerage Facilities Act will become effective in 1967 to help fill this gap. Under its provisions, all individual sewerage disposal systems will henceforth have to be designed and installed in accordance with standards adopted or approved by the Pennsylvania Department of Health. In areas where septic tanks will not work well, this probably means that sewers will have to be installed before houses are built rather than after problems occur. The homeowner will benefit by avoiding extra expense for septic tanks which must later be replaced by sewers.

The Sewerage Facilities Act is intended primarily to prevent future problems rather than correct old ones. It does, however, have provisions designed to encourage the extension of municipal sewers into already developed areas where it is economically feasible.

County and Municipal Ordinances

In addition to these state laws, there are various county and municipal ordinances which may be applicable to local situations.

Federal Water Pollution Legislation

The Federal Water Pollution Control Act has been amended several times in the past ten years. The trend of these amendments has been to strengthen and broaden the powers of the Federal Government in the control of water pollution. The Federal jurisdiction applies to interstate waters or portions thereof, and this could be interpreted to include not only Lake Erie, but any stream in Pennsylvania. Thus, the Federal influence is beginning to be felt in certain areas formerly considered to be of purely State and local concern.

The newly established Federal Water Pollution Control Administration will handle Federal pollution control activities. As this agency becomes well organized and established, we can expect more and more Federal intervention to correct stream pollution, whenever state regulations are inadequate.

CONCLUSIONS

The present Clean Streams Law provides an effective weapon in combating stream pollution. Armed with this legislation, the Pennsylvania Department of Health as the agent for the Sanitary Water Board, has been able to effect adequate controls for the abatement of this pollution. A violation of the Clean Streams Law constitutes a misdemeanor and must be prosecuted by due process of law. This protects the innocent and punishes the guilty.

SUMMARY

1. As stated before, there are many areas in Erie County where soil conditions are not favorable for subsurface disposal of domestic wastes. It is in these areas that future problems will arise. To supplement the Community Facilities Act, the County Planning Commission, in cooperation with the County Health Department, should adopt regulations which will control sub-surface disposal systems. However, on-lot or individual disposal systems should not be considered as a substitute for comprehensive sewerage planning.

2. Where sewers are presently needed, municipal officials should exert leadership in promoting the construction of sewer systems and sewage treatment facilities. Studies should also be initiated in areas of future growth.

3. Further cooperation by industry could be accomplished by the formulation of industrial groups to foster compliance with the Clean Streams Law. Pressure should also be exerted by these groups to see that day-to-day operations are conducted in a manner to prevent accidental pollution.

PROGRAMS OF ASSISTANCE IN COLLECTION AND TREATMENT OF LIQUID WASTES

At the present time, various state and Federal aid programs are available for public sewerage and sewerage treatment projects. The initial step in undertaking any project is, of course, planning. There are basically three phases of the planning operation. First of all, a feasbility study is made, to determine whether or not the project is economically feasible. Secondly, a preliminary plan is developed based on the most economically feasible alternative. Finally, plans are developed for the purpose of letting bids.

The Community Facilities Administration of the Housing and Home Finance Agency, is presently administering two programs for planning funds. Under Section 702 of the Housing Act of 1949, interest-free loans are available for preliminary and construction planning, but not for feasibility studies. The recently enacted Housing and Urban Development Act of 1965, provides for public works planning advances. The administration of this act has not yet been developed but a $70 million fund has been appropriated. The Consolidated Farmers Home Administration Act has provided funds for development of regional planning, which could include feasibility studies for sewer systems and sewage treatment works.

After contracts have been awarded, the project is ready for construction. There are numerous Federal grant and loan programs available for the construction of sewer systems and sewage treatment facilities.

The Water Quality Act of 1965 authorizes the Department of Health, Education, and Welfare, to make grants of 30% of project costs for the construction of sewage treatment facilities. For facilities conforming to a metropolitan comprehensive plan, the grant may be increased 10%. The Appalachian Development Act administered by the State Commerce Department makes grants of up to 30% available for sewage treatment. This act also provides for supplemental grants of up to 50% of eligible costs for economically depressed areas. However, the Sanitary Water Board has acted to limit these supplemental grants to 25%. Another program designed to aid communities of 5,500 population or less, is the Consolidated Farmers Home Administration Act and is administered by the U. S. Department of Agriculture. This act makes loans and/or grants available for sewage treatment and sewer systems. The grants will not exceed 50% of project costs. Loans can be for the total project cost, less grants.

There are two programs available for construction of sewer systems. The Housing and Urban Development Act of 1965, administered through the Housing and Home Finance Agency, provides for grants up to 50% of development costs. However, for needy communities with a population of 10,000 or less, the grant can be as much as 90%. The U. S. Department of Commerce has been authorized by the Public Works and Economic Development Act of 1965, to make grants of up to 50% of project costs for the construction of sewer systems. Economically depressed or needy communities can be awarded as much as 80% of project costs. As can be seen, there is an aid program to fit the needs of all municipalities.

Finally, the sewage treatment has been constructed and the grant funds paid. But, the aid programs do not end here. In 1953, the state legislature approved Act 339, which provides funds for the operation and maintenance of municipal sewage treatment plants. These annual operation grants amount to a full 2% of the initial cost of the plant.

Sewage is not the only liquid waste of concern as a pollutant. Most industries use water in their production processes, which create an industrial wastes. These wastes contribute a large share of the total waste load. At the present time, there are no aid programs which grant funds directly for treatment of industrial wastes. However, if the wastes are suitable for treatment in a municipal plant, the industry may benefit indirectly from the municipal grant programs. Recently, there have been several bills introduced into the Congress which would provide tax-incentives for those industries who treat their wastes. These bills are expected to draw favorable consideration from the Congress.

CONCLUSIONS

1. As the population of Erie County increases, the need for adequate sewage disposal will develop. This will involve expansion of existing facilities and construction of new facilities to satisfy this need. Municipal officials should recognize future problems and plan now for their solution.

2. As previously described, Federal loans and grants are available for all phases of the project. However, in order to apply for construction grants, feasibility studies are necessary. Public officials should authorize preparation of these studies, while sufficient funds are available.

3. In the past, Federal assistance programs have played an important role in the construction of waste treatment facilities in Erie County. If these anti-pollution projects are to be continued at the same rate, additional funds will be needed.

TABULATION OF EXISTING MUNICIPAL TREATMENT PLANTS

Sewage Treatment Plant	Municipalities Served	Degree of Treatment	Present Population Served	Design Population of S. T. P.	Estimated Population 2000	Estimated Volume*
Albion	Albion Cranesville	Complete	2,200	3,200	2,750	275,000
Edinboro	Edinboro	Complete	3,700	2,000	12,000 Includes College	1,200,000
Girard	Girard	Complete	2,450	2,000	4,800	480,000
Lake City	Lake City	Complete	1,700	3,200	3,450	345,000
North East	North East Boro	Complete	4,500	8,000	8,100	810,000
Union City	Union City	Complete	3,900	5,000	6,400	640,000
Waterford	Waterford	Complete	1,390	1,850	2,700	270,000
Georgetown Heights	Georgetown Heights	Complete	40	215	300	30,000
Corry	Corry	Complete	6,500	9,000	12,300	1,230,000
Erie	City of Erie		139,000		190,000	19,000,000
	Harborcreek T.		11,000		20,500	2,050,000
	Lawrence Park T.		4,500		7,500	750,000
	Millcreek T.		22,000		50,000	5,000,000
	Wesleyville		3,500		5,200	520,000
	Total	Complete	180,000	200,000	273,200	27,320,000
Totals	15 muncs.	Complete	206,380	234,465	326,000	32,600,000

There are 23 misc. sewage treatment plants serving school motels, country clubs, service stations, etc., where public sewers are not available.

*Estimated volume of sewage is based on present design criteria.

ERIELAND 2000

LIQUID WASTES

SUMMARY

I. SEWAGE

A. A master plan for the expansion of sewage facilities in Erie County should be developed. In such a plan, provision should be made to extend public sewers into new areas as soon as it is economically feasible. The plan would provide for future growth and would require frequent updating.

Where sewers are presently needed, municipal officials should exert leadership in promoting the construction of sewer systems and sewage treatment facilities. Package sewage plants should be built as an interim step until trunk sewers become available.

B. The proposed expansion of the Erie Sewage Treatment Plant to provide for secondary treatment for a design flow of 53 million gallons per day in the year 1985, should be approved. Plans should be drawn up and implemented for expansion of sewage treatment plants for other cities and areas in the county where rapid expansion of population is expected.

C. A plan should be dev loped and implemented for the step-wise separation of combined sewers in the City of Erie.

D. A mandatory certification program for sewage plant operators should be instituted.

E. There are many areas in Erie County where soil conditions are not favorable for subsurface on-lot disposal of domestic wastes. To control waste disposal the following actions should be taken:

1. Implementation of the State Community Facilities Act providing a uniform code of on-lot sewage disposal regulations.

2. County, township, or borough ordinances enacted under the Community Facilities Act should be uniform throughout the county.

3. Regulations should be enforced at the level of government where best results can be obtained, preferably at county level, by the Erie County Health Department.

F. A new State policy may allow individual homes to discharge treated wastes to receiving streams, the means of doing this should be made known to the political subdivisions throughout the county. This means of disposal should be used only in areas where percolation rates are poor.

G. Federal loans and grants are available for all phases of sewage treatment projects. Since feasibility studies are necessary in order to apply for construction grants, officials should authorized feasibility studies while funds for studies are available.

H. In the past, Federal assistance programs have played an important role in the construction of waste treatment facilities in Erie County. If construction is to continue at the same rate, additional grants will be needed.

II. INDUSTRIAL WASTES

A. Every effort should be made by those industries not in compliance with the regulations of the Sanitary Water Board or the City of Erie ordinance, to install the necessary waste treatment facilities.

B. Municipal treatment plants should treat industrial waste, within reason, after proper pre-treatment. Future construction or expansion of municipal sewage treatment plants should, within reason, include provision for handling industrial wastes generated within the area served by the treatment plant.

C. In certain specific areas, the necessary technology does not exist for treatment and/or abatement of the industrial wastes. Therefore, industry should consider increased research and development activities in waste treatment and during the interim period, utilize existing technical methods to effect a partial reduction of waste loads.

D. Industry should make every effort to avoid accidental discharges of industrial wastes which can cause fish kills and intermittent pollution.

E. Every effort should be extended by government bodies and industry, to continue the close cooperation that has existed in the past. Formation of industrial groups to foster compliance with the Clean Streams Law is desirable.

III. PESTICIDES

A. Pesticides should be non-persistent and of the lowest possible level of toxicity. Manufacturers should attempt to develop new materials safer for general use and which will have a minimum effect on human, animal, and aquatic life.

B. There should be additional educational programs on proper use of insecticides, pesticides, and herbicides. Pesticide application should be carried out in strict compliance with manufacturers instructions. Farmers should be instructed to avoid discharges into streams.

IV. EROSION AND RUN-OFF

A. Education in land management and use to eliminate heavy erosion and siltation and planting of stream banks with trees and vegetation should be encouraged. Improved practices in construction projects are needed to prevent soil erosion and subsequent siltation.

B. Proper practices should be followed to prevent excessive run-off of fertilizer. These include proper levels of application and cultivating practices to contain rainfall on the land.

V. LAKE ERIE

A. Since Lake Erie is of such importance to Erie County, both as a water source and as a source of income, the work involved in improving Lake Erie (as outlined in the Public Health Service Conferences held in 1965) should be accelerated and supported with substantial Federal funds.

B. Accelerated research is essential to eliminate the high degree of nutrients being discharged into the waters by treated and untreated waste. In Lake Erie interstate and international action will be required.

VI. DUTIES: FEDERAL, STATE, AND LOCAL

In controlling waste or pollution, it is the feeling of the committee that the various levels of government should cover the following areas:

A. Federal: Be the guardian over the interstate pollution problems and--

1. Take necessary action to prevent one state from affecting the other.
2. Take part in research.
3. Continue to finance through grants and loans additional construction of public waste treatment facilities.
4. Consider giving business and individuals tax write-offs and other economic considerations for the building of treatment facilities that reduce pollution.

B. **State: Be the caretaker of intrastate pollution problems and--**

   1. **Set standards of water quality.**

   2. **Take necessary action to prevent pollution from occurring within the State.**

   3. **Encourage through loans and grants, the construction of public waste treatment facilities.**

   4. **Through loans or other incentives, encourage business to construct necessary waste treatment facilities.**

C. Local County: Be the caretaker of local problems and--

   1. Through surveillance, keep the State advised on the sources of pollution.

   2. Take necessary action against minor cases of pollution (nuisances).

   3. Promote adequate sewage and waste facilities for the growing metropolitan areas.

   4. Where full-time County Health Departments exist, they should work with the Sanitary Water Board and the State Health Department to insure compliance with the regulations.

RECOMMENDATIONS

1. **A county-wide master plan for sewage and industrial waste collection and treatment should be developed and implemented under the leadership of city and county officials.**

2. **The City of Erie treatment plant should be expanded as currently proposed, and the program plan for the separation of combined sewers implemented.**

3. **Industrial waste treatment facilities must be expanded as needed, to comply with the requirements of the Sanitary Water Board.**

4. **The program for improving Lake Erie as outlined in the Public Health Service Conference in 1965, should be supported and accelerated with substantial Federal funds.**

5. **The educational programs provided by the County Agriculture Agents in the use of pesticides, fertilizers and erosion control should be further strengthened.**

SOLID WASTES

SOLID WASTES COMMITTEE

Erie County, Pennsylvania is located in the northwest corner of the State, its northern boundary being Lake Erie. The City of Erie is the population center of the county, containing approximately one-half of the county population. The 1966 estimated population for the city and county are 142,300 and 267,800, respectively. Estimated increases to 146,500 and 383,000 are forecast by 1990.

The county is largely industrialized, but there are some agricultural activities in less densely populated areas. The largest population increases are expected to take place in suburbanized areas. Experience has shown that when populations increase, there is an increase in per capita refuse generation. To prevent public health hazards and nuisances from developing, solid wastes must be regularly collected, transported, and disposed of in a satisfactory manner. Solid waste production estimates for the county have been made in the accompanying Table I.

A review of solid waste disposal in Erie County reveals that there are problems which need corrective action. In some parts of the county, the main problems are those concerning inadequate collection of wastes. In a few communities, the transportation of the refuse may be the cause of public health or economic problems. In most instances, however, the problems stem from some inadequacy in the final disposal of the wastes. The problems in solid waste in Erie County are typical of the country-wide problems in solid waste collection and disposal, and these kinds of problems resulted in the passage in Congress of the Solid Waste Disposal Act of 1965.

Definitions

The following definitions will be used throughout this report and are listed to ensure clarity.

1. Solid Wastes: garbage, rubbish, and other discarded solid materials, including industrial, commercial, and agricultural wastes.
2. Refuse: interchangeable with "Solid Wastes."
3. Garbage: organic waste resulting from the preparation, cooking, or processing of food products.
4. Rubbish: dry, combustible, and noncombustible material, such as paper, cans, bottles, and other wastes produced with the exception of garbage.
5. Open Dump: uncontrolled dumping of solid waste on the ground surface either with or without consequent burning.
6. Sanitary Landfill: controlled method of disposing of solid waste on land without creating health hazards or nuisances through compacting the wastes to the smallest practical volume and covering the packed material daily with a layer of earth.
7. Incineration: controlled burning of solid waste in specially designed furnaces to insure maximum volume reduction consistent with the production of no public health hazard or nuisance.
8. Private collector: collector who deals directly with individuals or business enterprises for the collection of refuse. Several private collectors may operate in or collect from, the same area.
9. Franchise collector: collector who is assigned the exclusive right to collect from a certain area by a governing body. The area may not utilize any other collector. Rates may also be controlled by public officials or by bids for franchise.

TABLE I

SOLID WASTE PRODUCTION ESTIMATES*

AREA	Population	Prod. 1 tons/day	Population	Prod. 2 tons/day	Population	Prod. 3 tons/day
City of Erie	138,400	276.9	148,000	370	146,500	438
Suburbs**	46,947	93.9	70,000	175	128,000	384
Urban Area	185,387	370.8	218,000	545	275,000	825
Erie County	250,682	501.4	294,000	735	383,000	1,150

* This table includes all residentail, industrial, and commercial solid wastes.

** Townships of Harborcreek, Lawrence Park, and Millcreek, and borough of Wesleyville.

[1] Based on average refuse production of 4 lbs. [4] per capita per day.

[2] Based on average refuse production of 5 lbs. [4] per capita per day.

[3] Based on average refuse production of 6 lbs. [4] per capita per day.

[4] Based on estimates by U. S. Public Health Service in "Solid Waste Handling in Metropolitan Areas." February 1964.

10. Contract collector: collector who has a contract with a municipality to collect in a certain area for a specified amount of money.

11. Solid waste master plan: written report of the situation at present, expected changes, and plans to meet the future needs of the next twenty years. The projected plans include how solid wastes will be handled, facilities needed, and capital budgeting program to meet these needs.

COLLECTION OF RESIDENTIAL WASTES

Poor refuse storage practices or infrequent collection, causes the propagation of other vectors in addition to flies. A variety of disease can be spread and carried by these vectors. Flies may carry and transmit such diseases as dysentary, diarrhea, typhoid, and others. Mosquitoes may transmit encephalitis, malaria, and yellow fever. Rodents may carry or transmit a number of diseases including salmonellosis, plague, murine typhus, leptospirosis and rat-bite fever. Improper storage practices and inadequate collection of rubbish, increases fire and accident hazards at the source causing loss of life and property.

As indicated by Table II, information on collection practices was collected in nine out of sixteen of the boroughs in both of the cities, and in two out of twenty-two townships in Erie County. These areas represent more than 80% of the county population. Although the survey does not provide in-depth information, it does not point out that a substantial portion of the citizens are receiving no refuse collection services.

Even in the City of Erie, collection was found below recognized good public health and municipal standards. Tax supported, city collection crews collect what is termed "garbage" once a week from each household. The remaining portion of the combustible and noncombustible rubbish is left to the householder to do with as he sees fit. In some cases, this means hauling it to a disposal site himself, or hiring one of the multitude of private collectors who collect these wastes. The latest figures show that 128 licenses were issued in 1966 for private refuse collection vehicles. The largest portion of these would be unregulated, individually-owned trucks. Due to lack of appropriate regulations, these are generally sub-standard collection vehicles. The competition and inefficiency of this business results in generally poor services to the residents.

The City of Erie and almost all of the remainder of the county, provide once-a-week collection service. Under a weekly collection program, regardless of household storage methods, flies will enter some containers and propagation will occur. Although strict regulation may improve storage practices and possibly decrease fly production, the only sure method to reduce the number of flies produced, is to collect the waste twice a week in the fly breeding season (June 1 - September 30). One study in Santa Clara, California, reported by Mr. Dean Ecke, showed that once a week collection from refuse cans allowed a median number of flies produced per can of 2, 292, while twice per week collection allowed a median of only 21 per can. This amounts to a 91. 7% reduction in fly production.

A large portion of the citizens in the county outside of the City of Erie have not been provided the essential service of good refuse collection. In some cases, private collectors or contract collectors are providing some service to the citizens. Most of the private collectors are not regulated by local or county authorities in either the collection or the disposal operation.

DISPOSAL OF SOLID WASTES

The practice of open dumping and open burning creates undesirable public health problems and nuisances, including air pollution, which has been related to such human disorders as asthma and emphysema. Water pollution to both surface and ground supplies can spread many diseases, such

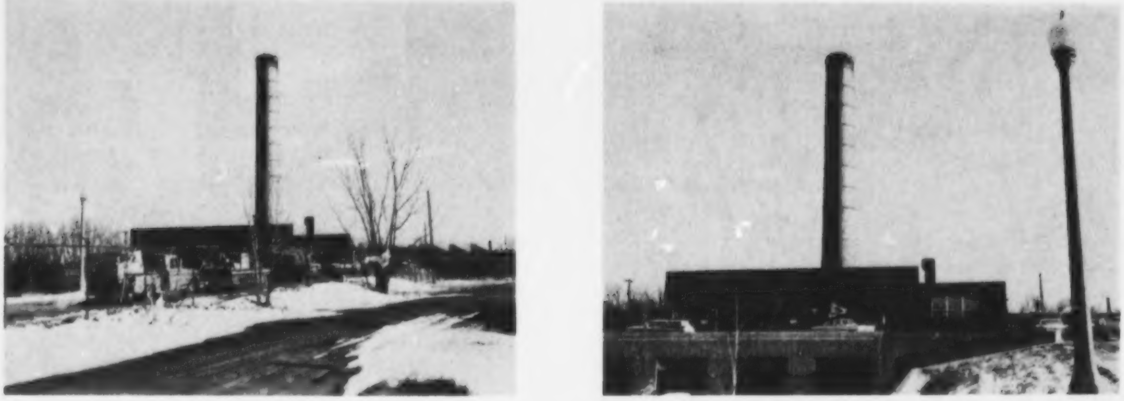
TABLE II

Name of Community	No. Homes Served (Percent)	Type of Collection	No. of Collection Per Week s-Summer w-Winter	Rate Per Month	Reqd. to Pay	Garbage Wrapped	Grinders Reqd.	Enclosed Trucks	Control of Home Incin.
BOROUGH									
Albion	450(75%)	Cont. (1)	1-M. R.[1]	1. 50	No	No	No	Yes	None
Edinboro	750(100%)	Cont. (1)	1-M. R.	1. 75	Yes	Yes	No	Yes	None
Fairview	280(70%)	Priv. (1)	1-M. R.	1. 50	No	Yes	No	Yes	None
Girard	400(50%)	Priv. (1)	1-M. R.	1. 50	No	Yes	No	Yes	None
Lake City	250(50%)	Priv. (1)	1-M. R.	1. 50	No	Yes	No	Yes	None
North East	1, 320(100%)	Cont. (1)	2-(s)-M. R. 1-(w)-M. R.	0. 75	Yes	Yes	No	Yes	None
Union City	726(60%)	Priv. (1)	1-M. R.	1. 60	No	No	No	No	Sept. '66
Waterford	425(90%)	Priv. (1)	1-M. R.	1. 50	No	No	No	No	None
Wesleyville	1, 200(100%)	Cont. (1)	2-(s)-M. R.	0. 45	Yes	No	No	Yes	None
CITIES									
Corry	1, 650(70%)	Fran. (1)	1-M. R.	1. 50	No	Yes	No	Yes	None
Erie (garbage)	40, 000(100%)	Pub. (1)	1-G[2]	Taxes	Yes	Yes	No	No	None
Erie (rubbish)	16, 000(40%)	Priv. (128)	?-R[3]	?	?	None	No	?	None
TOWNSHIPS									
Lawrence Park	1, 275(100%) 1, 275(100%)	Cont. (1) Cont. (1)	1-G 1/2-R	Taxes Taxes	Yes Yes	Yes None	No No	Yes No	None None
Millcreek	6, 300(60%)	Fran. (1)	1-M. R.	1. 38	No	Yes	No	Yes	None

1. M. R. - Mixes Refuse

2. G - Garbage

3. R - Rubbish



CITY INCINERATOR

DUMP SITE

GOOD SANITARY LANDFILL

CAR BODIES

RUBBISH ACCUMULATIONS IN CITY AREAS

as typhoid. Disease vector problems with refuse disposal are similar to those of refuse collection as discussed previously under collection. Uncontrolled "sanitary landfill" operations can create some of the same problems if care and knowledge are not used in the selection of the site and the maintenance and operation of the landfill. A report prepared by the Erie County Department of Health and the Pennsylvania Department of Health concerning water pollution from uncontrolled open dumping, has been submitted to the Secretary of Health.

As Table III indicates, (80% of the county population) refuse disposal for Erie County is in a generally uncontrolled state. Seven of the locations surveyed were transporting at least a portion of their refuse to one privately-operated sanitary landfill in Millcreek Township. The private collectors in the City of Erie transport part of the rubbish they collect to the same sanitary landfill. In addition, the residue from the city incinerators is also disposed of there. This site site is now filled almost to its ultimate capacity and the operator is searching for a new site.

The sanitary landfill in Millcreek Township is the only landfill which receives sufficient refuse to be close to an economical operating level. The other five landfills are on such a small basis that it is not economical to provide adequate equipment and labor to satisfy all public health criteria for sanitary landfills.

The Erie County Department of Health has been making fine efforts to control open dumping within the county. Some cases have been brought to court and steps have been made to close some of the worst dumps. State laws or more specific, county laws, would be helpful in maintaining control over and the closure of the dumps in Erie County.

Private sanitary landfill operators in Erie County are having a difficult time in securing land for future sites. A large part of the problem lies in the public attitude toward sanitary landfills. Very few citizens know the difference between a sanitary landfill and an open dump. Since the private operator must either lease or purchase the land, it is quite difficult for him to secure the most beneficial sites for his operation. In other counties of the United States, experience has shown a county-operated disposal program can produce excellent, economical solutions to these problems with health hazards. A government agency, such as the county can acquire the land, by eminent domain if necessary, and could operate, or have operated sanitary landfills located in the optimum haulage places. Delaware County, Pennsylvania has been operating a county disposal program for several years. Municipal and private collectors and industry there bring refuse for disposal and pay for disposal on a tonnage rate basis.

A puzzle exists in the investigation of open dumping practices. There are at least fourteen dumps known to the committee. There must be others which serve some areas, but about which no information is available on disposal. The exact necessity for many of these dumps is not known. For instance, Corry has one small landfill, and an even larger dump.

Every open dump site visited was posted with a sign reading "No Garbage." Even a casual view of the sites showed that organic matter was being disposed of at these dumps. One site visited in Girard Borough was so posted, and small holes for garbage had been provided a short distance from the face of the dump. During one visit it was obvious to the visitors that the garbage and other organic matter was not being placed in the holes, but was mixed in and being burned with the rest of the refuse.

Some of the questions that still face the committee are: "Where is the refuse from some parts of the County, such as Elk Creek, Franklin, McKean, and Concord Townships being taken for disposal? Why is some of the refuse being transported such great distances, as in Albion, Edinboro, Girard, and Lake City Boroughs? Why is it necessary to maintain both an open dump and a sanitary landfill in many areas?"

The City of Erie is the only place in the County where incineration is used as a means of reducing the volume of refuse. Presently, the city has two incinerators which have a combined capacity of 425 tons per day (225 tons and 200 tons) if operated 24 hours a day. The actual amounts burned are considerably less than this (80 and 120 tons per day respectively), since the hours of operation are 8 and 16 hours respectively.

TABLE III

SOLID WASTE DISPOSAL

Name of Community	Disposal Method	Operated By	Ave. Haul Miles	Disposal Fee	Solid Waste Master Plan	Cap. Budget
BOROUGH						
Albion	San. Land.	Superior Refuse Disposal	19		No	
Edinboro	San. Land	Superior	15	Part. of Coll.	No	No
Fairview	San. Land Dump	Superior Fairview Twp.	8 3	$5/load	No	No
Girard	San. Land Dump	Superior Girard Boro	15 3	$5/load Taxes	No	No
Lake City	San. Land Dump	Superior Girard Twp.	15 2	$5/load $100/month	No	No
North East	San. Land	Mr. Seelinger Boro & Twp.	9 1	Taxes	No	No
Union City	Dump	Union City Boro	1	Trucks-$1-$5	No	No
Waterford	San. Land	Mr. Monroe	1	Cars - $.25 - .50	No	No
Wesleyville	San. Land	Superior	5		No	Yes
CITIES						
Corry	San. Land[1]	Contract	3/4	$375/month	No	No
Erie (garbage)	Incin. 425 ton	City of Erie[2]	2-1/2	Taxes	No	Yes
Erie (rubbish)	(Most rubbish collected by private collectors goes to landfill of Superior Refuse Disposal.)					
TOWNSHIPS						
Lawrence Park	San. Land	Superior	6		No	Yes
Lawrence Park	San. Land Dump	Mr. Beaute	2		No	Yes
Millcreek	San. Land	Superior	4	$1,000/month	No	No

Corry also has a public dump -- no information available.

Incinerator residue goes to Superior Refuse Disposal Landfill.

The plants are of an older design and are not equipped with continuous feed facilities, automatic stoking, or automatic residue removal. It is estimated that volume reduction is 75% so that residue amounts to *25% by weight (*50 tons per day). Six to eight truck loads per day are taken to the sanitary landfill in Millcreek Township for disposal.

Several problems exist at these plants. Because of the short hours of operation they are subject to periodic heating and cooling which requires higher maintenance costs due to damage to the furnace, such as the refractory. Because of the collection system used, traffic delays at the incinerators are very serious and costly at times. The city trucks have priority in unloading at the incinerators in order to provide more efficient collection. Anyone may bring combustible refuse to the incinerator without charge. During certain periods of the day, and particularly on Saturdays, the traffic backs up for long distances when private collectors, industries, and individuals bring in their refuse. Very few of the trucks are provided with mechanical devices for unloading and therefore each must be unloaded by hand. This takes considerable time.

Since the use of garbage grinders within Erie County is reportedly not extensive, and since the quantities of solid wastes therefore would be affected little, garbage grinders were not studied in detail in this report.

One of the most perplexing situations concerning the county as a whole, was the problem of why refuse from lightly populated areas was brought into heavily populated Millcreek Township for disposal. It would seem more reasonable for the smaller areas to combine in transporting refuse to closer and more economical sanitary landfill areas. These are but some of the numerous unanswered questions occurring to committee members during this study.

INDUSTRIAL WASTES

With the cooperation of the Manufacturers Association of Erie, a questionnaire (see Appendix B) was mailed to all of Erie Counties industries, to determine several factors; present waste quantities, cost of disposal, location of disposal sites, and future anticipated growth. Sixty-seven (67) manufacturers of over the 100 that were canvassed, replies. The total returns, in no way, reflect the total industrial waste that is generated in Erie County. The questionnaire does reveal, however, some important facts on which further studies could be based.

It was reported that these 67 manufacturers spend approximately $16,000 per month to remove industrial waste from the plant premises, or, in some cases, dispose of wastes on their own land.

Totals from the 67 industries indicate there are approximately 6,200 tons of materials, such as sand, plastic, and paper; 17,000 cubic yards of miscellaneous waste; and also 30,000 pounds of other industrial waste produced each month. These quantities and costs indicate a need to study the quantities and types of wastes that are generated within Erie County industries in greater detail before development of a master plan for solid waste disposal.

Forty-two (42) of the reporting industries have indicated that they contract for the disposal of the wastes. The remainder utilize their own equipment to either haul the materials to a city incinerator, dispose of it on their own property, or haul it to various parts of the county. Since most of the industries are contracting for the removal of refuse from their premises, they do not know where it ultimately goes. They are, in fact, contributing to the problems of the many dumps throughout the county which, at present, are not completely controlled by any agency within the county. If the recommendations of this report are to be implemented, it is certain that the ultimate disposal of industrial wastes in Erie County will need inclusion in the master plan for waste disposal.

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*Estimated

JUNKED CARS AND BULKY WASTES

The junk car problem in Erie County does not appear to be any different from the problems that face any state or any community in the United States. The Institute of Scrap Iron and Steel is aware of the problem of junk cars and they have stated that enough processing equipment to handle all the scrap, abandoned and obsolete cars is available in the United States and in Erie County. A major scrap processor in Erie, also an associate member of the Institute gave this opinion. He is currently purchasing sophisticated equipment which will handle all the junked cars that may be scrapped in Erie County.

The real problems with junked cars are from the auto wrecking yards where auto hulks are stored for long periods of time and the lack of regulation by local government. Townships, boroughs, and cities throughout Erie County have not effectively regulated the abandonment of junk cars. Junk cars constitute an accident hazard to youngsters and afford a breeding and harborage area for mosquitoes, insects, and rodents, as well as causing an air pollution problem when burned before shearing and compaction.

A proposal by the Pennsylvania Department of Commerce to regulate junk automobiles, is currently being made. This would create a "vehicle and refuse control commission." This act spells out the implementation of standards which have been set forth in the regulations to govern junk yards, scrap processors, the abandonment of automobiles and all other factors related to junked cars.

In addition to junked cars, large bulky wastes, such as refrigerators, washing machines, stoves, and demolition and construction wastes are presenting a problem at present in Erie County. Nobody wants the bulky appliances. The scrap processor does not want them because of the number of contaminants (copper, rubber, brass) which make the steel of the appliance not suitable for melting. Landfill operators do not want any of these wastes because they require special attention when incorporated into a landfill. Subsequently, they are often abandoned in areas where they become an accident hazard if accessible to children. They are also a potential hazard as a breeding area for mosquitoes, since they can retain rain and flood waters for a long time. Rodents also find ideal harborage in them.

This problem has been called to the attention of the Pennsylvania Department of Commerce for study. It is hoped that state regulation can result so that appliances could ultimately be classified with junk automobiles and regulated accordingly. The economics of large appliances are somewhat different from those of junked cars; however, the problem must be met and legislation on a local or state level proposed and adopted.

Public Law 89-285 provides the Secretary of the U. S. Department of Commerce with several means to provide for scenic development and road beautification of the Federal-aid highway systems. The storage, handling, processing, and disposal of solid wastes, particularly junk cars and bulky wastes, will be effected by this law. The essence of the law is that no such facility can be visible if located within 1,000 feet of the Interstate or primary highway system.

FUTURE DISPOSAL NEEDS

Future solid waste disposal needs can be determined for Erie County, based on three different assumptions: (1) the present city incinerators (75% volume reduction) will be used to full capacity (approx. 425 tons per day) and sanitary landfills (50% volume reduction) will serve the rest of the county and handle the incinerator residue; (2) sanitary landfills will be used exclusively (50% volume reduction) and the incinerators shut down; (3) new incinerators will be built to handle the excess that the present incinerators can not handle, sanitary landfills will handle incinerator residue only (80% volume reduction).

Table IV shows the amount of land required for all three assumptions for the present and by 1990. Further study in depth seems necessary, to determine if these or another plan is most suitable for long range use. It is certain that planning agencies must consider land for solid waste disposal sites in future land use planning for Erie County.

TABLE IV

LAND REQUIRED PER YEAR FOR SOLID WASTE DISPOSAL

Disposal Method	Acres[1]		Accumulative Acres Through 1990
	Present	1990	
San. Land and Incin.	14.8	39.5	680
San. Land Only	26.8	57.5	1,052
Incin. Only	10.7	23.0	422

[1] Based on 1.0 acre per year for sanitary landfill and 0.4 acre per year for incineration for every 10,000 population at present, with an increase of 5 % by 1990, an average landfill depth of 7 feet is used. See Appendix for details.

LEGAL AND LEGISLATIVE BACKGROUND

The County Commissioners can establish a Solid Wastes Disposal Authority and finance and/or operate solid waste disposal facilities under the provisions in the county code for 3rd to 8th class counties, Article 23, Sections 1975 and 1693. The Authority would be empowered to control all disposal activities within the County, whether private or public. They could operate the facilities or arrange for their operation. With their control, disposal operations would be established at strategic locations, with adequate funds available through schedules of fees for disposal. The small open dumps which scatter the county landside would be eliminated and future dumps prohibited.

Several sources existed for receiving financial assistance to conduct studies and investigation leading to a master solid waste plan for Erie County. The U. S. Department of Health, Education, and Welfare, through the Public Health Service, has funds available under PL 89-272, the Solid Waste Disposal Act.

The Act provides among other items, studies, investigations, and State and Interstate Planning. The U. S. Department of Housing and Urban Development, under Section 701 of the Housing Act of 1954, is authorized to support planning which includes solid waste disposal.

FINDINGS

1. Within Erie County there are presently being produced more than 500 tons of refuse per day. A survey conducted by the solid waste committee could account for only 80% of the collection and disposal of this material. Collection and disposal systems within most of the County are fragmentized and inadequately controlled by local governments.

2. Funds are available to assist local governments in conducting studies, preparing plans, and demonstrating new techniques in solid waste disposal. The funds are, or will be, available from several sources, including the U. S. Public Health Service, U. S. Department of Housing and Urban Development, and the Pennsylvania Department of Health.

3. The smaller, uneconomic and unhealthy disposal sites within Erie County should be closed and the solid wastes taken to a few, larger, more economic and properly operated disposal facilities. A master solid waste plan coordinated with land-use plans of county, would delineate such sites which could be either publicly or privately operated.

4. The survey by the solid waste committee found five sanitary landfills, two incinerators, and at least fourteen open dumps in Erie County. The open dumps are a menace to health, as well as being unesthetic. The County Health Department, through the use of existing laws and regulations, has not been able to control or eliminate these dumps. County laws specifically closing open dumps would add support to the County Health Department in their efforts.

5. The survey by the solid waste committee shows that only 1,500 persons out of the County population of 250,682 are receiving solid waste collection twice per week in the summer. Many public health studies have proven time and again, that the only effective means of reducing fly production in refuse storage areas, is by providing at least twice per week collection of wastes during the warm summer months, coupled with suitable storage practices.

6. It has been found that little or no provision is currently made for the handling or disposal of industrial wastes. Due to the large number of industries, a specific program providing for their wastes, would assist in cleaning up the county's solid waste problem. The affected industries have cooperated in many community benefit efforts in the past, and will no doubt welcome the opportunity to participate in the improvement of solid waste disposal in Erie County.

7. Junk cars and bulky wastes are a problem in Erie County mainly because of the lack of regulation concerning the handling, storage, processing, and disposal of these wastes. Adequate regulation, and aid, such as proposed by the Pennsylvania Department of Commerce, would assist greatly in solving the problem.

RECOMMENDATIONS

1. The Commissioners of Erie County, with the support of the local officials, should establish and form a "Solid Waste Disposal Authority" which would provide the entire county with properly controlled, and suitably located, disposal facilities and sites.

2. Application should be made immediately to the State of Pennsylvania and to the Federal Government, for funds to make a thorough study of solid waste problems in Erie County, and to develop a master plan for solid waste disposal in the entire county. (Study under way.)

3. The "Solid Waste Disposal Authority" should coordinate a master solid waste plan for Erie County as soon as it has been developed with future land-use plans and implement its operation at the earliest possible date.

4. Necessary legislation should be established to eliminate open dumping and open burning in Erie County.

5. The collection of solid wastes in the Urban areas of Erie County, should be on the basis of no less than two collections per week during the summer months.

6. The "Solid Waste Disposal Authority" should assume the responsibility for, and develop a plan with, industry in Erie County for the handling and disposal of industrial wastes in a safe, sanitary, and acceptable manner.

7. The "Solid Waste Disposal Authority" should assume the responsibility for the control of junk autos and other bulky waste, and should establish regulations to ensure adequate storage, handling, processing, and disposal of these wastes.

8. Planning authorities in Erie County should include land for solid waste disposal sites in current land-use plans.

APPENDIX

A. COMPUTATIONS FOR FUTURE DISPOSAL NEEDS

1. Using Present Incinerator plus Sanitary Landfills

1966 Population: 267,800

Population to be handled by incineration: 200,000

Population to be handled by sanitary landfill: 67,800

Acres of land required for incineration:

$$\frac{200,000\ (.4)}{10,000} = 8$$

Acres of land required for landfills:

$$\frac{67,800\ (1)}{10,000} = 6.8$$

Total 14.8

1990 Population: 383,000

Population to be handled by incineration: 200,000

Population to be handled by sanitary landfill: 183,000

Acres of land required for incineration:

$$\frac{200,000\ (.4)}{10,000}\ (1.5) = 12$$

Acres of land required for landfills:

$$\frac{183,000\ (1)}{10,000}\ (1.5) = 27.5$$

Total 39.5

Accumulative Acres required through 1990 (25 years):

$$\frac{14.8 + 39.5}{2}\ (25) = 680 \text{ acres}$$

2. Sanitary Landfills Only

1966 Population to be served by landfills: 267, 800

Acres of landfill required: $\frac{267,800\ (1)}{10,000} = 26.8$

1990 Population to be served by landfills: 383, 000

Acres of landfill required: $\frac{383,000}{10,000}\ (1.5) = 57.5$

Accumulative Acres through 1990 (25 years):

$$\frac{26.8 + 57.5}{2}\ (25) = 1,052 \text{ acres}$$

3. Incineration Only

1966 Population to be served by incineration: 267, 800

Acres of land required: $\frac{267,800\ (.4)}{10,000} = 10.7$

1990 Population to be served by incineration: 383, 000

Acres of land required: $\frac{383,000\ (.4)}{10,000}\ (1.5) = 23$

Accumulative Acres through 1990 (25 years):

$$\frac{10.7 + 23}{2}\ (25) = 422 \text{ acres}$$

Manufacturers Association of Erie

801 French Street

Erie, Pennsylvania

INDUSTRIAL WASTE

This questionnaire was developed to furnish information as to the disposal of industrial waste from Erie County industries. This information will be utilized by the Committee on Solid Wastes, which is working towards a long-range plan for solid waste disposal in Erie County. It is requested that information submitted be as near accurate as possible, and any unusual increases which may be anticipated in the future, be included under comments:

I. Name and address of Plant

II. Type of Waste (e.g., ash, sand, glass, paper, plastics, etc.)

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________

III. Amount of Refuse Generated Per Month (e.g., gallons, tons, yards, etc.)

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________

IV. Collection and Disposal of Refuse

A. Frequency (monthly, weekly, daily, etc.)

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________

B. Who Collects (Plant Personnel, City, Contract -- if contracted, give name and address of contractor)

1. ______________________________

2. ______________________________

3. ______________________________

C. Where Does It Go (own premise, private property, township dump, landfill, incinerator, etc.)

1. ______________________________

2. ______________________________

3. ______________________________

4. ______________________________

D. Cost of and Disposal per month

1. ______________________________

2. ______________________________

3. ______________________________

V. Comments

Return questionnaire to the office of the Manufacturers Association of Erie, 801 French Street, and to the attention of Mr. John Hamilton.

AIR POLLUTION

ERIELAND 2000

AIR POLLUTION COMMITTEE

Erie County is located on the southeast shore of Lake Erie in the Lake Erie Coastal Plain. The topography of the county is marked by a low ridge running parallel to Lake Erie, eight to ten miles inland. The terrain rises gradually in a series of ridges parallel to the shoreline of Lake Erie, to a height of 500 feet above the lake level, three to four miles inland. This underslope usually increases the amount of precipitation from instability showers off the lake, to the south of the City of Erie somewhat higher than the fall along the immediate shoreline. Lake Erie has a stabilizing effect on the area's weather. It moderates temperatures during the winter months, but causes considerable cloudiness. Extreme weather conditions are generally associated only with frontal passages.

According to data obtained from the United States Weather Bureau Station at Port Erie Airport, the predominant wind direction is from the south-southwest and southwest quadrants. This appears to be the case, both during the summer and winter months of the year, although the wind direction appears to be more variable during the summer months. Winds less than seven miles per hour occur only twenty percent of the year (five year average - 1960 through 1965). Selected wind data, in summary form, may be found by referring to the appendix.

Precipitation is well distributed throughout the area, although the number of days with measurable amounts varies considerably from a low average of 9 in August to 17 in November and December. The average daily maximum temperature is 57. 1 degrees and the average daily minimum temperature is 39. 4 degrees.

In general, it would appear that variable meteorological weather conditions provide sufficient horizontal and vertical diffusion of air contaminants, and do not favor the buildup of adverse pollution levels. Extended inversion conditions exist only on an infrequent basis. Land and sea breezes, which can be expected on a coastal plain, tend to prevent any major buildup of contaminants.

The area of study consists of a heterogeneous urban and rural population. Neither the population nor the industrial density is considered extremely high. However, residential-industrial complexes have resulted from unplanned urban growth enhancing the potential for local air pollution problems.

According to the projections of the planning commissions of the City and County of Erie, the trend indicates a flux of people from the city to suburban areas sourrounding the city. It can be expected that as the population increases in the suburban areas, new industrial sites will be developed. In locating these sites, potential pollution problems should be considered. Since the predominant wind direction appears to be from the southwest, it is logical that these industrial complexes be located northeast of any major population center. Such a location will allow the contaminants to be dispersed over areas with relatively lower population density, thus markedly decreasing the potential for serious air pollution problems. Consideration should also be given to forming "buffer zones" between industrial and residential areas. Such buffer zones could conceivably be a community's commercial district, or some form of recreational area. In communities such as the City of Erie, where no land is available "down wind" from the residential areas, the formation of buffer zones becomes more important.

In any discussion involving planning for the control of air pollution, a review of the legal means for controlling the problem, is in order. At the present time, parts of the area are directly or indirectly affected by existing legislation at the local, state, and federal levels.

The City of Erie operates a Bureau of Smoke Abatement under authority of City Council Bill No. 8619, effective April 1, 1961. The Bureau of Smoke Abatement is responsible for enforcing the provisions of the ordinance and was given authority to control pollution resulting from use of fuel-burning equipment open burning, and others. However, it is not clear whether the

Bureau can effectively enforce the provisions of its ordinance. At the time this study was conducted, the city was investigating the feasibility of an attempt to improve the air pollution program through the securing of financial aid from the U. S. Department of Health, Education, and Welfare, under the Clean Air Act (1963). If the city elects to continue to operate its air pollution program independently of other political subdivisions within the county, the ordinance should be revised and modernized.

No other political subdivision operates an air pollution control agency or has an ordinance directly relating to the control of air pollution. However, some zoning ordinances make general reference to air pollution and can be used to minimize the potential for new problems. In certain instances, nuisance laws may also be used to curb local air pollution problems.

At the present time, all air pollution problems in the area of study, are under the jurisdiction of the Commonwealth of Pennsylvania's Air Pollution Control Program. This program was established by the Air Pollution Control Act of 1960, P. L. 2119, amended January 24, 1966. The provisions of this act established the agencies which handle the state's air pollution program: regional air pollution control associations, and the Air Pollution Commission. The act also authorized the Department of Health to investigate all complaints of air pollution and established procedures for the disposition of these matters. Erie County is located in Air Pollution Commission Region III and has representation on the Region III Air Pollution Control Association. Although the Association has the authority to handle all air pollution problems in its thirteen counties, it has, in the past, preferred to let local agencies handle the problems in their respective areas of jurisdiction. Thus, the City has been handling problems within its boundaries.

Even though the City has an active control agency, the city is not exempt from state regulations. These may be exercised if necessary, for the effective control of air pollution problems. A local agency can only function on an independent basis if its program has been approved by the Air Pollution Commission.

Indirectly, air pollution control is also affected by the Federal Clean Air Act of 1963 (P. L. 88-206) and the Clean Air Act Amendments of 1965 (P. L. 89-272) which provide grants-in-aid to municipalities wishing to establish new or improve old air pollution control agencies. Under the federal program, the individual municipalities could also enter into an agreement for the control of air pollution and receive matching funds from the Federal Government on a three-to-one basis. Since air pollution overlaps municipal boundaries, it is believed that the establishment of such an intermunicipal district is necessary to provide an effective program and to prevent future air pollution problems. Such an agency should proceed to establish a permanent monitoring system which would indicate any acute or chronic buildup of air contaminants. An intermunicipal agency would be more desirable than the aforementioned agency operating within the boundary of the City of Erie and would be able to provide more comprehensive control of the area's pollution problems.

SOURCES OF POLLUTION

Transportation: In the last few years increasing importance has been attached to the effects of motor vehicle exhausts from both diesel and gasoline-powered engines. In 1964, the census of motor vehicles for Erie County was as follows:

Cars	93, 845
Commercial Trucks	15, 593
Buses	382
Motorcycles	1, 127
Suburbans	14, 023
Total	125, 060

OPEN DUMP BURNING

POINT SOURCE OF CONTAMINATION

BACKYARD INCINERATION

TABLE II (1)

ESTIMATED LOSSES FROM TRANSPORTATION EXHAUST

COMPONENT	AUTOMOBILE	DIESEL
	Tons Lost/100,000 gal. Gasoline Burned	Tons Lost/1,000 bbl. Diesel Oil Burned
Total Hydrocarbons (As Hexane)	31.61	3.86
C_3+ Hydrocarbons (As Hexane)	9.49	3.00
Aldehydes	0.17	0.21
Nitrogen Oxides (As N^02)	10.60	2.19
Sulfur Oxides (As S^02)	1.30	0.93
Particulate Matter	0.45	2.33
Acids (As CH_3COOH)	0.66	0.83

In 1975 it is expected that a total of 110,000,000 motor vehicles will be operated in the United States. This represents an approximate thirty percent increase over the 1964 United States census of 86,000,000. If it is assumed that a thirty percent increase can be expected in Erie, it can be predicted that approximately 162,500 vehicles will be registered in Erie County in 1975.

The emissions from vehicles varies depending upon the type of fuel used. However, factors for calculating the emissions which can be expected from these sources may be found by referring to Table II in the appendix. If, for example, it is assumed that each of the automobiles registered in Erie County (93,845) is driven an average of 12,000 miles per year with an average fuel consumption of 15 miles per gallon, the following contaminants might be emitted:

Total Hydrocarbons	2400 Tons/yr.
Aldehydes	13 Tons/yr.
Oxides of Nitrogen	800 Tons/yr.
Sulfur Oxide	100 Tons/yr.
Particulate Matter	34 Tons/yr.
Acids	50 Tons/yr.

It appears to be the concensus of opinion that the emissions from diesel-powered engines, while obnoxious, are considerably less noxious than those from the gasoline-powered internal combustion engine found in the passenger automobile. In many cases, emissions from diesel engines can be substantially reduced by adjusting engine operation to provide the proper fuel/air ratio. The gasoline-powered engine presents a more complicated problem and two approaches to the control of auto exhaust are being pursued:

1. Engine modification
2. Tailpipe afterburners

Since vehicles represent a transient source of pollution, it is not considered likely that local regulations would be effective in controlling this type of emission. Even state regulations may not be an effective solution. The Pennsylvania Air Pollution Commission, however, has the problem under consideration. The Federal Government has entered this field under the provisions of Public Law 89-272, Title II, The Control of Air Pollution from Motor Vehicles. This law authorizes the Secretary of Health, Education, and Welfare to establish standards for the control of emissions from gasoline-powered automobiles and light trucks. These standards are as follows:

For engines of 140 cu. in. or less cylinder displacement...

a. Hydrocarbons, 375 parts per million of exhaust.

b. Carbon monoxide, 2 percent by volume.

For engines with a displacement in excess of 140 cu. in.

a. 275 parts per million.

b. Carbon monoxide, 1.5 percent by volume.

Devices for the reduction of exhaust emissions to the above levels are to be installed on all 1968 model-year automobiles. It can be expected that the provisions of this law will aid in reducing harmful automotive emissions over a period of years provided that a suitable plan for insuring maintenance of these devices can be developed. Such a plan may be left to state and/or local agencies. In view of the Federal actions in this area, it is suggested that local agencies in Erie County should not attempt to enter into this field at this time, but rather analyze the results of the Federal program.

Combustion: The industrial, commercial, institutional, and domestic combustion of fuel for both heating and steam production, is a major source of pollution in any community. Figures from the Pennsylvania Gas Company indicate that 92 percent of the assessed property in the City and County of Erie, utilize natural gas for combustion operations; seven percent use fuel oil; and one percent use coal. The one percent utilizing coal or fossil fuel, is of major importance in assessing the total pollution load in the Erie air reservoir. Factors for calculating the emissions from combustion processes, may be found by referring to Tables III, IV, V, and VI in the appendix.

TABLE III (2)

ESTIMATE OF PRODUCTS OF COMBUSTION FROM INDUSTRIAL FUEL BURNING OPERATIONS
(Emissions in lbs/lb Fuel Fired)

POLLUTANT	FUEL			
	COAL	FUEL OIL	NATURAL GAS	WOOD
Sulfur Dioxide	1.7 x S*	1.8 x S	1.8 x S	0.00008
Sulfur Trioxide	0.2 x S	0.2 x S	0.2 x S	N. A. **
Hydrogen Sulfide	0.004 x S	N. A.	N. A.	N. A.
Oxides of Nitrogen (As NO_2)	0.010	0.013	0.005	0.0006
Total Hydrocarbons	0.010	0.005	0.0005	0.010
Inorganic Chloride (As HC_1)	0.002	N. A.	N. A.	N. A.
Fluorides (As HF)	0.0002	N. A.	N. A.	0.000003
Organic Acids (As Ch_3COOH)	N. A.	0.015	0.0012	0.0002
Aldehydes (As CH_3CHO)	N. A.	0.0018	0.0004	0.0009
Ammonia	N. A.	0.000006	0.000006	N. A.
Particulates	See Table IV	0.00025	N. A.	0.000013

*S = lbs Sulfur/lb. fuel
*N. A. = Not Available

TABLE IV (2)

ESTIMATES OF PARTICULATE EMISSION FROM INDUSTRIAL COAL BURNING
(Emissions in lbs/lb. Fuel Fired)

FIRING METHOD	SOLID EMISSION
Traveling Grate	0.15 x A*
Cyclone Furnace	0.15 x A
Spreader Stoker (No Dust Reinjection)	0.60 x A
Spreader Stoker (Dust Reinjection)	1.00 x A
Pulverized Coal	0.75 x A
Underfeed Stoker	0.15 x A

*A = Ash content of coal

TABLE V (2)

ESTIMATES OF COMBUSTION PRODUCTS FROM DOMESTIC FUEL BURNING OPERATIONS (Emission in lbs/lb Fuel Fired)			
POLLUTANT	FUEL		
	COAL	NATURAL GAS	COMBUSTION WASTES
Sulfur Dioxide	1. 8 x S*	1. 8 x S	0 0004
Sulfur Trioxide	0. 04 x S	0. 2 x S	N. A. **
Hydrogen Sulfide	0. 004 x S	N. A.	N. A.
Oxides of Nitrogen (As NO_2)	0. 0002	0. 004	0. 00025
Total Hydrocarbon	0. 010	0. 0015	0. 12
Inorganic Chlorides (As HC_1)	0. 0002	N. A.	N. A.
Fluorides (As HF)	0. 0002	N. A.	N. A.
Organic Acids (As CH_3COOH)	N. A.	0. 0012	0. 0008
Aldehydes (As Ch_3CHO)	N. A.	0. 0006	0. 002
Ammonia	N. A.	0. 000006	0. 0009
Particulates	See Table VI	N. A.	0. 012

*S = lbs Sulfur/lb fuel
**N. A. - Not Available

TABLE VI (2)

ESTIMATES OF EMISSIONS FROM DOMESTIC COAL BURNING (Emissions in lbs/lb Coal Fired)			
FIRING METHOD	CARBON & TARS (1 u dia.)	CARBON & TARS (1 u dia.)	ASH (1 u dia.)
Hand Fired Furnaces	0. 006	0. 004	0. 002
Stoker Fired Furnaces or Stoves	0. 0025	0. 0015	0. 0015
Hand Fired Stoves	0. 014	0. 010	0. 003

* u - Micron = 1/25, 400 inch

TABLE VII

SUMMARY OF AIR POLLUTION PROBLEMS - COUNTY OF ERIE								
TYPES OF INDUSTRY	No. of Plants With A. P. Problems	TYPES OF AIR POLLUTION PROBLEMS INVOLVED						Total Problem Per Industry
		Particulate Boiler Emissions	Odor	SO_2	Smoke	Open Burning Emissions	Dust	
Furniture & Fixtures	1	1						1
Paper & Allied Prod.	1	1		1				2
Petroleum & Coal Prod.	1	1	1					2
Rubber Products	1	1	1					2
Primary Metal Ind.	1	1						1
Fabricated Metal Prod.	1		1		1			2
Utilities & Sanitary Ser.	9		1			8		9
Farms	2		1			1	1	3
Stone Clay & Glass Products	1					1		1
Scrap Yard	3		1		2	3		6
Educational Services	1	1			1			2
TOTAL A. P. PROBLEMS	22							

An inventory of the suppliers of coal in the City of Erie, indicates that industrial users of coal consume 659,675 tons annually (1965). Two hundred forty thousand tons of this fossil fuel is consumed by a public utility, and is used for the generation of electricity. This particular company has installed electrostatic precipitators with a rated efficiency of 98 percent for the collection of fly ash generated during the combustion of the coal. The remaining coal, strip and deep mine, is consumed by industries utilizing the various types of boilers and firing methods. It is reasonable to assume that additional amounts of coal are burned in domestic heating units, which are not reflected in the above coal consumption figures. However, this amount is assumed to be minor when compared to the above figure.

In a typical borough, within Erie County, the following information has been obtained concerning fuel consumption: Total gas customers - 1,635. Forty of these are commercial accounts and the remainder are domestic accounts. This represents an average monthly gas consumption of 25,000,000 cubic feet. In addition, there are 165 homes heated by units utilizing petroleum products. Domestic and industrial sources also utilized approximately 2,200 tons of coal per year.

The consumption of fuel, particularly fossil fuel, appears to be one of the two major problems, the other being open burning, in the study area. Reference Tables VII and VIII in the appendix, indicates that smoke and fly ash problems constitute the major problem in the area. The excessive emissions are generally caused by improperly operated boilers or by use of out-of-date facilities. With this in mind, the committee believes that any regulations developed by either municipal or intermunicipal agencies should have provisions which directly relate to the control of emissions from this source. Specific reference is made to the Ringelmann Standards incorporated in many municipal regulations.

Industrial: The industrial population of the study area is widely varied and includes the manufacture or processing of primary metals, pulp and paper, chemical and allied products, rubber and food. However, many of these industries are not engaged in processes which result in extensive emissions to the atmosphere. This is evidenced by the fact that few of the complaints reaching the City Smoke Abatement Bureau and the Pennsylvania Department of Health, refer to problems, such as metal fume or acid mists, etc., created by industrial emissions. However, when considering expected population increase and associated industrial increase, it is logical to assume that unless properly regulated, industrial emissions will increase. Therefore, agencies considering the development of air pollution control regulations, should be aware that industrial emissions do exist and provisions should be made for the control of these emissions.

Waste Disposal: As indicated elsewhere in this report, the collection and disposal of wastes is, and will continue to be, a serious problem in the City and County of Erie. Usually the collection of wastes is not of particular concern in the evaluation of air pollution potention. However, two methods of disposal utilized in the study area merit discussion: open burning and "backyard" trash burners and municipal incineration.

Open burning is a prevalent air pollution problem in the study area. The records of the Pennsylvania Department of Health, indicate that fifteen investigations to evaluate air pollution from open burning operations at private dumps, have been conducted in the past three years. The records of the City of Erie indicated that 108 investigations involving "backyard" burning were made during 1965. Table IX in the appendix, provides an estimate of the amount of contamination resulting from this type of incineration, as compared to the relatively efficient municipal incinerator.

From the air pollution viewpoint, the properly operated municipal incinerator and the sanitary landfill are the most satisfactory methods of waste disposal. Only two incinerators exist in the study area at the present time. Both of these units (total capacity 425 tons/day) are operated by the City of Erie. Few complaints have been received by the city concerning the operation of these units. However, it can be assumed that they contribute to the total pollutant load. This contribution is much less than would be expected, if the waste was burned in some other manner.

The solid wastes subcommittee has indicated that by 1985, the refuse generated in the study area will approximate 956 tons/day. If open burning practices are not prohibited, it can be

TABLE VIII

SUMMARY OF AIR POLLUTION PROBLEMS - CITY OF ERIE

TYPES OF INDUSTRY	No. of Plants With A. P. Problems	TYPES OF AIR POLLUTION PROBLEMS INVOLVED					
		Boiler Emissions	Odor	Smoke	Open Burning Emissions	Dust	Total Problem Per Industry
Furniture & Fixtures	5	4	1	1	2		8
Paper & Allied Prod.	1	1	1				2
Metal Industries	3	2	1	2	1		6
Rubber Products	2	2	1	1			4
Machinery, etc.	7	4	1	5	1		11
Utilities & Sanitary Service	2	1		1		1	3
Scrap Yards	5	2	3	4	4		13
Auto Repairs & Garages	4	2		2	1	1	6
Medical & Health Services	2	2		2			4
Dairies & Groceries	3	2	2	3	2		9
Miscellaneous, Bottling, etc.	3	2		1	1		4
Laundries	2	2		1			3
Constructions	2	1		2	1		4
Educational Services	7	7		6			13
TOTAL A. P. PROBLEMS	50	35	10	33	16	2	96

TABLE IX

EMISSIONS FROM INCINERATORS*		
COMPONENT	MUNICIPAL-COMMERCIAL	BACKYARD
Aldehydes as HCHO	.055	.200
Ammonia	.015	.115
Nitrogen Oxides as NO_2	.105	.030
Acids as CH_3COOH	.030	.075
Organics	.070	14.000
Solids	1.150	1.120
Sulfur Oxides as SO_2	.095	.060

*Tons emitted/100 Tons burned.

TABLE X(5)

SOURCES OF AIR POLLUTION			
CLASS	AEROSOLS	GASES AND VAPORS	TYPICAL LOSS RATES
Combustion Processes	Dust, fume	NO_2, SO_2, CO, organics, acids	0.05 - 1.5% by weight of fuel
Automotive Engines	Fume	NO_2, CO, acids, organics	4-7% by weight of fuel (Hydrocarbons)
Petroleum Operations	Dust, mist	SO_2, H_2S, NH_3, CO, Hydrocarbons, mercaptans	0.25 - 1.5% by weight of material processed
Chemical Processes	Dust, mist, fume, spray	Process-dependent (SO_2, CO, NH_3, acids, organics, solvents, odorous materials, sulfides)	0.5 - 2% by weight of material processes
Pyro-and-electro-matallurgical processes	Dust, fume	SO_2, CO, fluorides, organics	0.5 - 2% by weight of material processes
Mineral Processing	Dust, fume	Process dependent (SO_2, CO, fluorides, organics)	1 - 3% by weight of material processed
Food and feed operations	Dust, mist	Odorous material	0.25 - 1% by weight of material processed

assumed that much of this material will be destroyed in this manner. At the present time, no political subdivision, with the exception of the City of Erie, has an ordinance pertaining to open burning. It can logically be concluded, therefore, that the political subdivisions individually or collectively, should take the necessary measures to control such operations.

If it is assumed that available land for landfill operations is limited, it is proper to recommend that an authority-operated incinerator complex be established with units located so as to be easily accessible to all parts of the county. These units could be built in conjunction with landfill sites, where segregation of wastes and efficient disposal could be accomplished.

Effects of Air Pollution

Residents of the United States indirectly lose billions of dollars every year as a result of air pollution. The effects of these pollutants are many and varid: metal is corroded, buildings are defaced, paints are discolored and destroyed, textiles are soiled, and the health of humans, animals, and plants is jeopardized.

Perhaps the most noticeable effect of air pollution is the reduction of visibility by small particles which remain suspended in the atmosphere for extended periods of time. This reduction of visibility often places an economic burden on a community, by hampering transportation and requiring increased use of lighting facilities.

A second major effect of atmospheric pollution is soiling. Soiling may be caused by airborne coarse and fine particulate matter, which settles out on horizontal surfaces, such as windowsills and automobiles, and which adheres to clothing, drapery, etc. Soiling results in increased operating cost in the home as well as in hospitals, hotels, office building, and industry. Many industries have been unable to locate in cities with high soiling indices, because their processes require a clean atmosphere.

Corrosion is a third effect of air pollution. Four types of pollutants which can cause corrosion are oxidants (ozone, oxides of nitrogen, etc.); acids (oxides of sulfur, carbon dioxide, etc.); salts (ammonium sulfate and ammonium chloride) and alkalies. Among the many materials subject to corrosion are the building materials, such as limestone and masonry, metals, such as copper and zinc, textiles, leather, and rubber products, etc.

The effects of air pollution may also be evidenced on plant and animal life. For example, certain species of conifers are sensitive to sulfur dioxide concentrations of 0.3 - 0.5 ppm during the growing season. Tomato plants are susceptible to damage by ethylene, a component of auto exhaust, and ozone will attack tobacco crops. Fluoride emissions from the super phosphate fertilizer industry have proven deleterious to the health of cattle.

The effects of air pollutants on public health are frequently the most difficult to assess. However, more and more evidence is being accumulated which suggests that the combined affects of the many pollutants found in the urban atmosphere are directly related to the incidence of chronic and acute respiratory infections. This evidence also suggests that the presence of certain contaminants in the air, may be related to the incidence of lung cancer. All of the effects of air pollution have an adverse influence on the economy of the community in which they occur.

REFERENCES

1. "Literature Review of Metropolitan Air Pollutant Concentration - Preparation, Sampling and Assay of Synthetic Atmosphere," Stanford Research Institute, November 1956.
2. "Pure Air for Pennsylvania," Pennsylvania Department of Health and Public Health Service, U. S. Department of Health, Education, and Welfare, November 1961.

RECORDS

1. Bureau of Smoke Abatement, City of Erie.
2. Pennsylvania Department of Health, Region III Office, 1963-65. "Prevention and Control of Air Pollution by Process Changes or Equipment." A 58-11, by Andrew H. Rose, et al: 1958 - U. S. Public Health Service, Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio.

GLOSSARY

Air Contaminant

Smoke, dust, fume, gas, odor, mist, vapor, pollen, or any combination thereof.

Air Pollution

The presence in the outdoor atmosphere of one or more air contaminants in sufficient quantity and of such characteristics and duration to be injurious to human, plant or animal life, or to property, or which unreasonable interferes with the comfortable enjoyment of life or property throughout the Commonwealth, or throughout such areas of the Commonwealth as shall be affected thereby.

Air Reservoir

That air mass retained over an air basin at any specific time, as delineated by the meteorological and topographical characteristics of that basin.

Local Air Pollution

Air pollution in a specific area readily discernible as being caused by a single source or group of sources in close proximity to each other.

Ringelmann Smoke Chart

The Ringelmann Scale for Grading the Density of Smoke as published by the U. S. Bureau of Mines.

Total Pollutant Load

The aggregate of all contaminants determined to be in any air reservoir.

Source

Any point at, from, or by reason of which there is emitted into the outdoor atmosphere any air contaminant.

ERIELAND 2000

AIR POLLUTION COMMITTEE

STATEMENT OF PROBLEM

The City and County of Erie has a heterogeneous rural-urban population with small, scattered industrial complexes located within the major urban centers; but particularly in the City of Erie. This unplanned setting has resulted in the creation of air pollution problems which, if unsolved, can seriously affect the area's health in the future.

SUMMARY

The City and County of Erie are located on the souteast shore of Lake Erie in a part of Pennsylvania designated as the Erie Coastal Plain. Because of the lake, the prlonger buildup of adverse pollution levels is prevented. The predominant wind direction is from the southwest quadrant at an average speed of 9. 9 miles per hour. This wind provides frequent changes in the air resources of the Erie air reservoir.

The heterogeneous industrial-residential characteristics of the urban area enhance the potential local air pollution problem. Although the industry of the area is varied, the major air pollution problem appears to be created by emissions resulting from the domestic and industrial consumption of fuel, particularly fossil fuels, such as fuel oil and coal, and waste disposal. Industrial contaminants from sources other than combustion, and automotive exhausts, although contributing to the total pollutant load, do not appear to have created a significant number of problems.

The City of Erie is the only political subdivision in the study area operating an air pollution control agency at the present time. However, the city's procedures and regulations will require up-dating if that agency is to operate an effective program. Funds are now available through the Department of Health, Education, and Welfare for the establishment and improvement of municipal and intermunicipal air pollution control agencies. These sources could be used to aid the improvement of the program in Erie.

Air pollution does not recognize municipal or political boundaries. The close proximity of several municipalities in Erie County enhances the potential for intermunicipal air pollution problems. For that reason, it is logical to assume that an intermunicipal agency would provide a more comprehensive and effective control program than would several individual, municipal agencies. Such an agency would also be eligible to receive Federal assistance funds.

The over-all air pollution problem in Erie County has not yet reached critical proportions. However, steps should be taken now to prevent further contamination of the air resources

RECOMMENDATIONS

As a result of study of air pollution in the City and County of Erie, it is recommended that:

1. An intermunicipal agency be established to coordinate all air pollution activities in the City and County. This agency shall be staffed and equipped to permit it to execute recommendations below listed, plus any additional measures found to be necessary to provide an effective air pollution control program in the city and county.

2. The intermunicipal agency apply to the U. S. Department of Health, Education, and Welfare for funds to establish and develop an air pollution control program in accordance with provisions contained in the Clean Air Act of 1963, P. L. 88-206.

3. The intermunicipal agency develop rules and regulations as may be found to be necessary for the control of air pollution, through a comprehensive study of air quality, and through an inventory of air pollution sources. Immediate attention should be focused on regulations to control problems resulting from open burning and the combustion of fuels.

4. The intermunicipal agency establish a permanent monitoring program to provide an adequate record of air quality.

5. The intermunicipal agency not enter into the field of automotive exhaust control pending the results of the U. S. Department of Health, Education, and Welfare's program as authorized by the Motor Vehicle Air Pollution Control Act, Title II, P. L. 89-272.

6. The intermunicipal agency cooperate with the parties responsible for the control of solid wastes to develop methods of waste disposal which minimize air pollution. Federal funds for solid waste disposal demonstration projects are available under The Solid Waste Disposal Act, Title III, P. L. 89-272.

HOUSING

PREFACE

The City and County of Erie, Pennsylvania, are separate governmental agencies within the framework of the State's constitution. The initiative for metropolitan commissions and departments is left entirely to the County and City officials acting in agreement. In many communities across the Nation, the joining of such departments as planning, water, and especially health, have been taking place at an accelerated rate. This is not the case in Erie County, however. The City maintains its own health department, planning commission, water department, etc., apart from the County, and the possibility of future consolidation appear remote.

This division made the over-all collection of data and information more difficult, because the information which is available to the City, is not available in the County. While the City has had an enforceable housing code program in effect since 1958, the County has yet to legislate such a program. The City housing inspectors were acquainted with the structural conditions of the City's housing and therefore had a base upon which to begin a detailed housing study. The City Planning Commission was also engaged in a series of studies and reports comprising a city master plan. Information, maps, and charts were taken from the Master Reports on "Housing Conditions, Land Use and Population" published in the spring of 1965.[1]

The Greater Erie Anti-Poverty Action Committee has also been extremely active in the field of data-collection, in conjunction with the organization of Erie County's "War on Poverty." The data concerning housing conditions in the poverty or slum areas, plus information on health and disease rates, juvenile delinquency, and secondary school dropouts, was made available for our use.[2]

The deterioration of the existing housing supply has been a continuing concern of the Federal, State and local Governments. While much of existing housing inventory has not been properly maintained, new residential construction has failed to keep pace with population growth and mobility. As a result, slums and blighted areas have shown a steady increase.

What we have known as the renewal concept - redevelopment of slum and blighted areas and the prevention of further deterioration and decay through rehabilitation and conservation activity - has succeeded largely through the efforts of the Federal and local governments in development programs to increase the housing supply primarily for the low income groups.

In the County, communities have begun to realize the need for redevelopment, renewal, upgrading, and new starts in housing. A redevelopment authority is being formed to put the City of Corry and Union City into the first active housing program in the county, outside of the City of Erie.

The clearance, re-use and redevelopment of privately-owned blighted areas, depends largely upon the use of governmental subsidy or private capital, or a combination of both. Rehabilitation and conservation require the utilization of such tools as urban planning and code enforcement to arrest the further decline of housing inventories.

GOOD HOUSING

BAD HOUSING

REHABILITATION

BEFORE

AFTER

James McLaughlin, Chief
Housing & Rodent Control

Left to right:
Dennis Chiaramonte, Asst. Chief; Charles Myers, Inspector; Michael Buttice, Inspector; James McLaughlin, Chief; Joseph S. Crawford, Inspector; and Thomas Dawson, Inspector.

Mary Hatkevich, Secretary
Housing Division

ERIELAND 2000

HOUSING COMMITTEE

The County of Erie, Pennsylvania, located in the northwest corner of the state, comprises an area of 810.9 square miles, with a population of 250,682, of which 138,440 reside within the City of Erie, according to the 1960 U. S. Bureau of Census Report. The total housing units number 78,929, with 66,083 (83.8 percent) being maintained in a sound condition.

Statistics from the 1960 Census reveal that Erie County's housing problem is slightly less severe than the average community across the Nation. There are 10,008 deteriorating units in the County, or 12.6 percent, as compared to the national average of 14.4 percent. 3.6 percent (2,835 units) are dilapidated. In the City, 12.9 percent (5,647 units) are deteriorating and 3.1 percent (1,361 units) are dilapidated. (See Charts I and II.)

Erie County faces increase housing problems in the future, since 65.9 percent of existing dwelling units are twenty years or older in age. The highest incidence of code violations will be found in this category. The County also has 4.3 percent (3,315 units) uninhabitable dwelling units of which only 605 lie inside City limits. The remaining 2,710 are located in the county or rural areas.

The City of Erie contains 12,498.79 acres or 19.53 square miles of which 10,040.79 acres are developed, and 2,468 are vacant. Residential areas account for 34 percent of the City, non-residential areas equal 21.5 percent, and open land consumes 44.5 percent of the total land area. (See Table I.)

In the summer of 1963, a housing-conditions field survey was conducted by the Erie City Planning Commission. This survey did not include an interior inspection, and thus the percentages obtained are somewhat less than those reported in the 1960 Bureau of Census reports. A summary of the Commission's report shows that there are 29,616 residential and 3,638 non-residential structures located within the City, for a total of 33,254. 10.4 percent of the residential and 16.6 percent of the non-residential buildings are showing signs of deterioration and blight.

The majority of blighted structures are in the older neighborhoods of the City, where most of the two-family and multi-family structures are located. While only 11 percent of the total structures and 7.2 percent of the single family homes are blighted, almost 20 percent of the two-family homes and nearly 30 percent of the multi-family dwellings are showing signs of deterioration and neglect. It should also be noted here that the high percentages of deterioration of non-residential structures indicates that they too should be subject to the same standards as residential homes, since they are equally important to the health and safety of the community.

Undeveloped land acreage within the City of Erie is fast disappearing. In 1930, this land totaled 5,631 acres, which dropped to 3,579 in 1955, and 2,195 in 1963. At the present rate of consumption, the vacant land would be consumed by 1969. But a more realistic projection would show that a vast majority of today's vacant acreage will be developed and occupied for urban use by 1975.

The City has not had any land expansion since 1923, and further expansion by annexation of adjacent territory is very unlikely. As a result, neighboring suburbs and townships surrounding the City are growing at tremendous rates. Millcreek Township alone has recorded a 464 percent increase in population since 1930. The fact that the City's land growth has been stymied will mean that with the amount of land now available for further growth is limited to approximately 10,000 more in population, unless the present trend shifts from one-family to multi-family and high-rise apartment housing. Therefore in future years, we can expect a significant rise in suburban populations and more important, a rise in suburban housing problems.

Another important aspect is the fact that the population will continue to grow at a faster rate than the City will be able to absorb. Consequently, more and more families will settle or make their homes in the suburbs. Those migrating from the City will be professional and skilled personnel in the middle and upper income brackets. The City, then, faces a seriously rising proportion of low

HOUSING CONDITIONS - 1960
CITY AND COUNTY
ERIE, PENNSYLVANIA

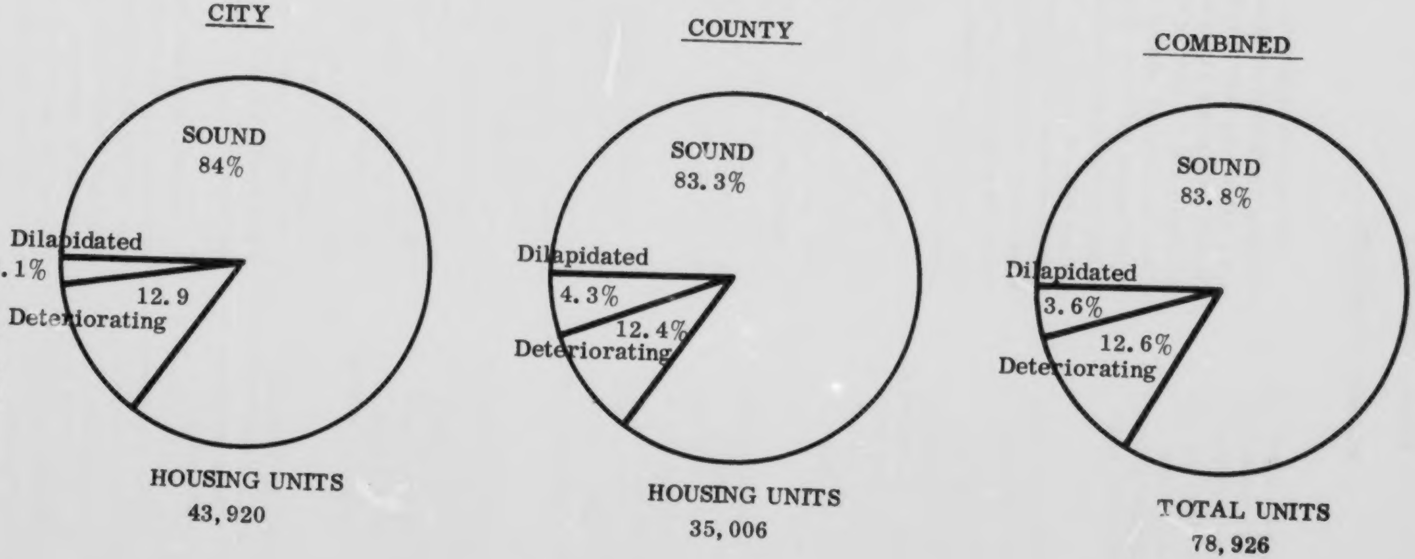
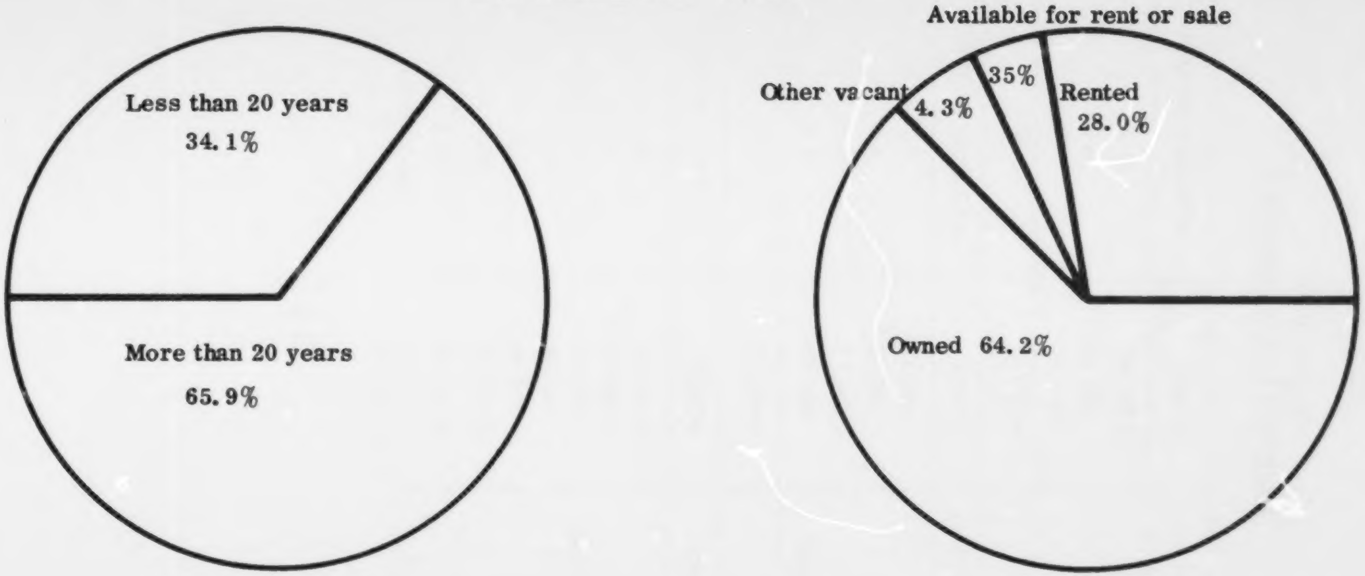


CHART NO. 1

Source: U. S. Census of Population & Housing - 1960
Bureau of the Census

HOUSING CHARACTERISTICS

Erie County, Pennsylvania 1960
Total Housing Units 78, 926



AGE OF BUILDINGS

TENURE

CHART NO. II

Source: U. S. Census of Population and Housing - 1960
Bureau of the Census

TABLE I

CITY OF ERIE
DEVELOPED LAND ACREAGE[3]

RESIDENTIAL	ACRES	PERCENT OF CITY
Single - Family	3,318.46	26.6
Two - Family	616.20	4.9
Milti - Family	318.69	2.5
Sub - Total	4,253.35	34.0
NON-RESIDENTIAL	ACRES	PERCENT OF CITY
Business	466.17	3.7
Transportation	563.70	4.5
Production	1,209.71	9.7
Social & Cultural	451.70	3.6
Sub - Total	2,691.28	21.5
OPEN LAND	ACRES	PERCENT OF CITY
Streets	2,458.00	19.7
Parking	161.87	1.3
Recreational Areas	351.85	2.8
Cemeteries	105.04	.8
Water	273.68	2.2
Vacant Land	2,203.72	17.7
Sub - Total	5,554.16	44.5
Grand - Total	12,498.79	100.0

income families, higher unemployment, growing blight areas, and increasing major and juvenile crimes. At the same time, it faces a serious reduction in necessary tax revenues.

As migration from urban to suburban areas continues to increase, the problems placed before county officials is how best to locate the new population. Effective planning and housing code enactment and enforcement will be the key. The boroughs, townships, and county planning commissioners must include in their planning programs: water and sewage systems; effective and strictly enforced zoning ordinances; recreational parks and playgrounds; cultural and historical sites; non-congested traffic flow, etc.

The county, through the Health Department, must enact a Housing Code and carry out an effective enforcement program. Such a program will prevent slum areas. Day by day surveillance will prevent the symptoms of decay and blight.

By the 1960 Census, Table III will show that by percentages, the soundness of structures in the county is similar to the City of Erie. (See also Chart I)

ERIE'S HOUSING PROBLEM

Decay can lie like a dagger pointed at the heart of a city. This most evident in those neighborhoods which have grown without the benefit of a community plan. Decay is also apparent in the streets of certain neighborhoods. Decay can be found in residential areas near the noise and odors of business and industrial enterprises. Decay is apparent in a few particular neighborhoods, where hardly a dwelling can be found which offers the standards necessary for decent living.

Blight and slums are expensive. Not only do they rob the City and County of additional taxes, but they also rob the political subdivisions of the contribution of citizens who, because of them, have learned to live without hope or ambition. Furthermore, unchecked blight fans out in all directions, planting the seed of decay in healthy areas.

Erie County was organized in 1800 from part of Allegheny County. Today there are two third-class cities, sixteen boroughs, one first-class township, and twenty two second-class townships. The population of 98,473 in 1900, has increased to 250,682 in 1960, and is projected to 383,000 in 1990.

In the early years, Erie County was an agricultural county producing grapes and fruit in the North East area and potatoes in the western section of the county. The central area was mostly crop and dairy land, with the exception of Corry and Union City, which felt the effects of the oil discovery in Titusville in 1859.

As Erie grew industrially and commercially in the early days, the area of the county outside city limits became more and more a "dormitory" area for the city. A look at the county today will show the grape and fruit industry is still in the North East area. The potato industry has shifted to the southeast. The once-flourishing railroad industry in Corry and Union City has declined, until it is of little consequence to either community. Hardwood and metal industries have taken a foothold in the Corry-Union City area.

The railroad yards in the Albion-Cranesville area do not service the trains as formerly. Industry is moving into areas where water, sewerage, and transportation are available. Thus Erie City and metropolitan Erie is experiencing industrial growth.

The hinterlands then, as now, are providing a good protion of the working force and, by necessity, an increasing amount of the demand for housing to accomodate a shifting population. The age of many of the county boroughs; the changing types of work; and the change in the labor market are all facts that lead to the understanding that housing problems exist in the county, and will become more complicated as the population of the county grows.

TABLE II

CITY OF ERIE
DEVELOPED LAND ACREAGE [3]

STRUCTURE	TOTAL STRUCTURES	BLIGHTED STRUCTURES	PERCENT BLIGHTED
Single - Family	22,954	1,663	7.2
Two - Family	5,379	1,048	19.4
Multi - Family	1,283	379	29.5
Sub - Total	29,616	3,090	10.4
Business	2,576	473	18.3
Transportation	490	8	12.6
Production	509	96	19.5
Social & Cultural	63	30	5.8
Sub - Total	3,638	607	16.6
Grand - Total	33,254	3,697	11.1

TABLE III

ERIE CITY AND COUNTY
CONDITION OF HOUSING UNITS[5]

	Erie Co. Units	Percent	Erie City Units	Percent	City-County Units	Percent
Sound	66,083	83.7	36,912	84.0	29,171	83.3
Deteriorating	10,008	12.7	5,647	12.8	4,361	12.4
Dilapidated	2,835	3.6	1,361	3.2	1,474	4.3
TOTAL	78,926	100.0	43,920	100.0	35,006	100.0

The City of Erie, Pennsylvania, first settled at the turn of the 19th Century, was incorporated as a borough in 1805, with a population of about 250. The first city plan was devised by Andrew Ellicott, dividing the borough into rectangular blocks. The east-west streets numbered one through twelve and north-south streets included Parade, German, Holland, French, State, Peach, Sassafras, Myrtle, and Chestnut. It has since grown to a size of 19.53 square miles and a population of 140,000 people. Annexation of land took place from 1833 to 1923, and the greatest increase in population occurred from the post Civil War era until 1914 and the start of the First World War.

The City can be arbitrarily divided into the "Old City" and the "New City" with the former including the bayfront to 26th Street and Cranberry Street to Hess Avenue. This area, built prior to World War I, contains a higher density of population, greater mixed land use, higher rate of conversions from one-family to multi-family dwellings, as well as the older structures. The boom in new housing ushered in during the 1940's and the 1950's which were primarily one-family and suburban in nature left these older dwellings available for transient-type rentals. In addition, the rising cost of repairs and the huge expense of installing advanced heating, plumbing, and electrical facilities, prohibited substantial rehabilitation. As a result, blight and decay advanced. See Map No. 1.

The City of Erie's battle against blight and slums is underway. The County's program is in the embryo stage. Housing programs, each supplementing the other to form an integrated attack, are combatting the forces of slum and blight. Each has its own contribution to make in this battle. Each is dependent upon the other to achieve its greatest usefulness. The combination of the three programs in the City of Erie Housing Code enforcement, redevelopment, and public housing, constitute a unified program of better housing for all citizens of Erie.

Many factors contribute to Erie's housing problems. Some examples are as follows:

1. Low income families (tenants).
2. A lack of adequate and reasonable financing to accomplish repairs and improvements.
3. The inability of property owners to secure necessary financing for repairs because of poor credit ratings.
4. Aging structures.
5. Previous lack of housing code regulations.
6. Lack of consistency between housing, plumbing, electrical, and building codes.
7. Absentee ownership.
8. Ineffective and disregard of zoning regulations in past years.
9. Neighborhood change from owner occupied to transient type tenants.
10. General neighborhood decline.
11. Local economic conditions, such as unemployment, etc.

In Erie County, as stated above, the housing program is in the embryo stage. When county officials, through the County Planning Department, obtain Federal funds, the redevelopment and housing programs will start in Corry and Union City. Housing problems, like in the City of Erie, are also brought about in the county by:

1. Aging structures.
2. Lack of housing code regulations.
3. Lack of building, electrical, and plumbing codes.
4. Indifference and lack of enforcement of zoning regulations.
5. Economic factors related to job decline in the related communities.

The citizens of Erieland have a responsibility to themselves, to establish standards in housing and housing hygiene, that will provide attainable goals for the health and well-being of individuals and families. Some of the common standards that must be provided are the following:

1. Safe shelter: original construction must be sound and free of defects. The repair of older structures must comply with acceptable local standards.

2. Adequate living space: overcrowding produces tensions and physiological problems, as well as health problems such as disease transmission. These effects can project themselves into the community and reflect on the community as a whole. Privacy for the individual and the family unit is necessary for healthful and happy living.

3. Environmental Health safeguards: Proper housing construction and maintenance are one important part of environmental health.

4. Safe and adequate insulation and heating facilities: Erieland's constantly changing weather conditions require well-functioning and easily-controlled heating facilities equipped with safety devices and proper insulation to provide maximum comfort for the occupants. Man's health is largely dependent upon his ability to cope with the weather.

5. Adequate light and ventilation: proper light and ventilation are necessary for healthful living.

6. Sanitary facilities: a safe and adequate water supply is essential for every dwelling unit. Proper facilities, as well as frequent and regular garbage and trash removal, are just as important as water supply to maintain health standards affecting the home and community.

7. Recreation facilities: people today have more leisure time than ever before. The community has the responsibility for providing accessable and near-by facilities for this purpose.

The aforementioned standards are stated as requirements. When these requirements are not provided, apathy or frustration results. Many cities and communities have found too late that problems of this nature will not solve themselves.

Nationally, substandard housing areas contribute only 6 percent of the total revenue, yet expend 45 percent of all city revenus collected, while slums occupy only 20 percent of the average city's area, they produce the following statistics: (See Chart IV)[6]

60 percent of all tuberculosis

55 percent of all juvenile delinquency

50 percent of all disease

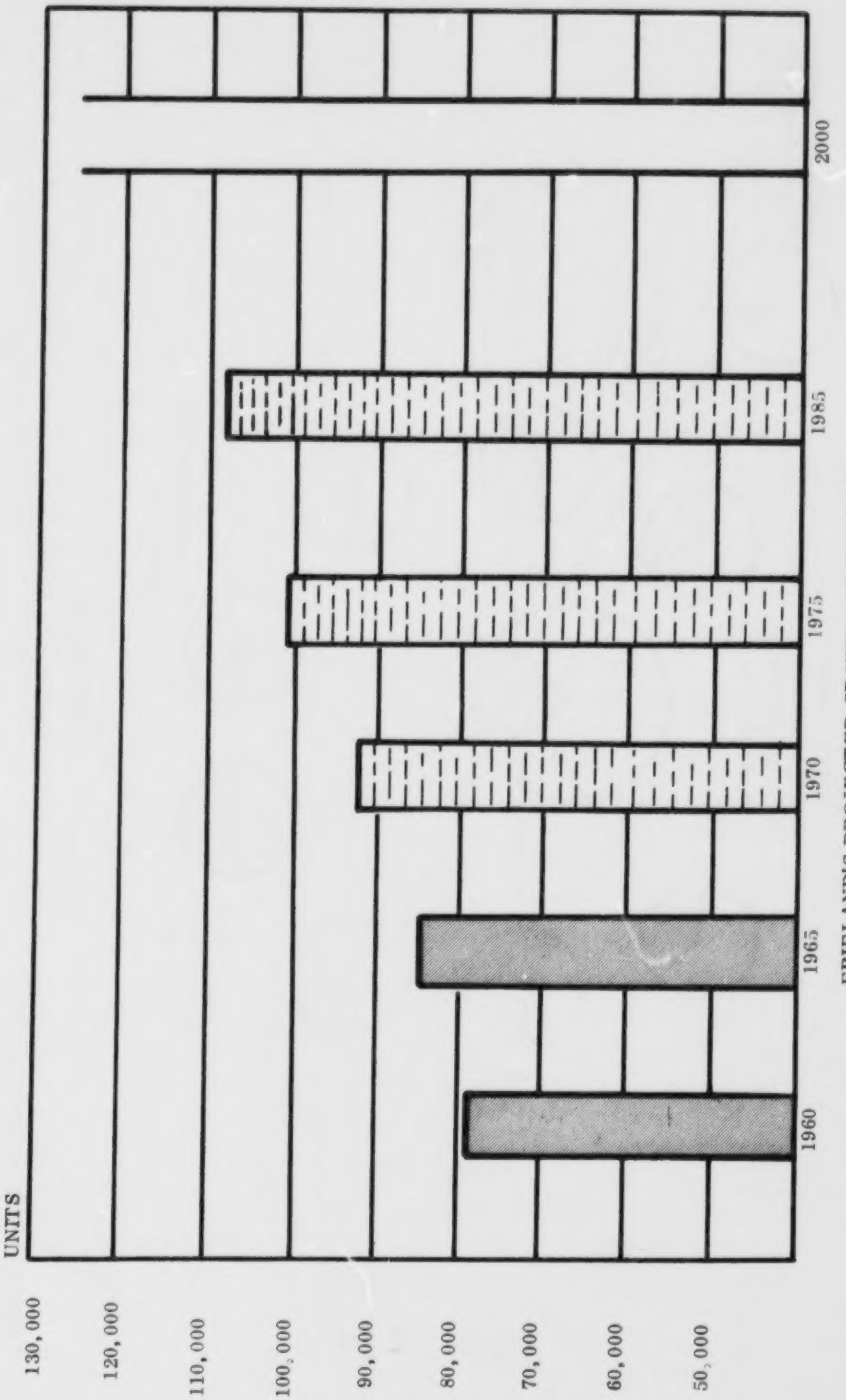
50 percent of arrests

45 percent of all major crimes

33 percent of all population

Locally, Erie's slum and blight areas represent 19 percent of the total city area and correspond to the Greater Erie Anti-Poverty Action Committee's selection of Erie's "Pockets of Poverty" representing priorities number one, two, and three in greatest over-all needs. These areas were selected not only on the basis of housing deterioration and dilapidation, but also due to the presence of high health, crime, and fire rates as well as large proportions of low-income families, unemployment, and secondary school dropouts. The first and largest area, pocket #1, including city census tracts numbers 12, 13, and 14, covers the area from Twelfth to Twenty-first Streets, Cranberry Street to East Avenue, and represents the greatest need for concentrated housing code enforcement, redevelopment, and rehabilitation. The second area, pocket #2, including city census tracts numbers 3 and 4, covers the area from the bayfront to Fifth Street, Cherry Street to East Avenue. The third section, pocket #3, which is city census tract number 15, includes Twelfth Street to Buffalo Road, East Avenue to Bird Drive (See Map #1.)

It is important to note that while these areas contain approximately 3.65 square miles or 19 percent of the total city, only 21 percent of the city's population reside there, and only 19 percent of the total dwelling units are located within their boundaries and yet they yield the following statistics:



ERIELAND'S PROJECTED GROWTH OF HOUSING

CHART III

SLUMS ARE COSTLY TO ALL*

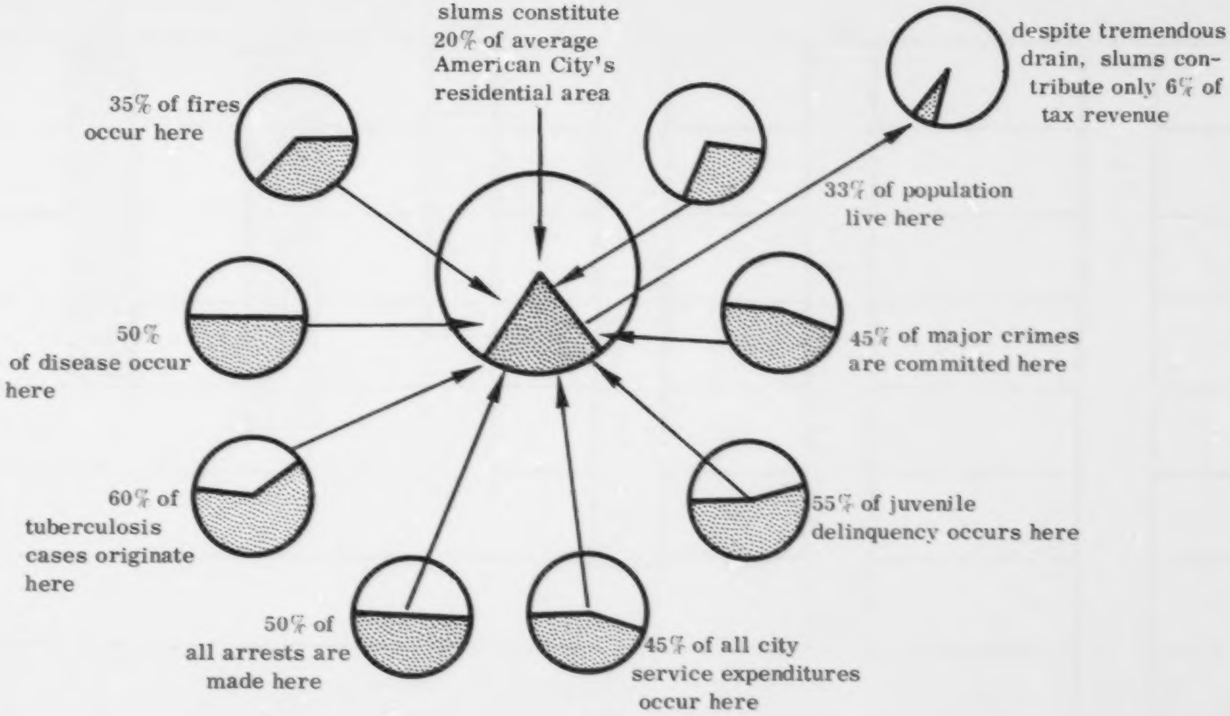
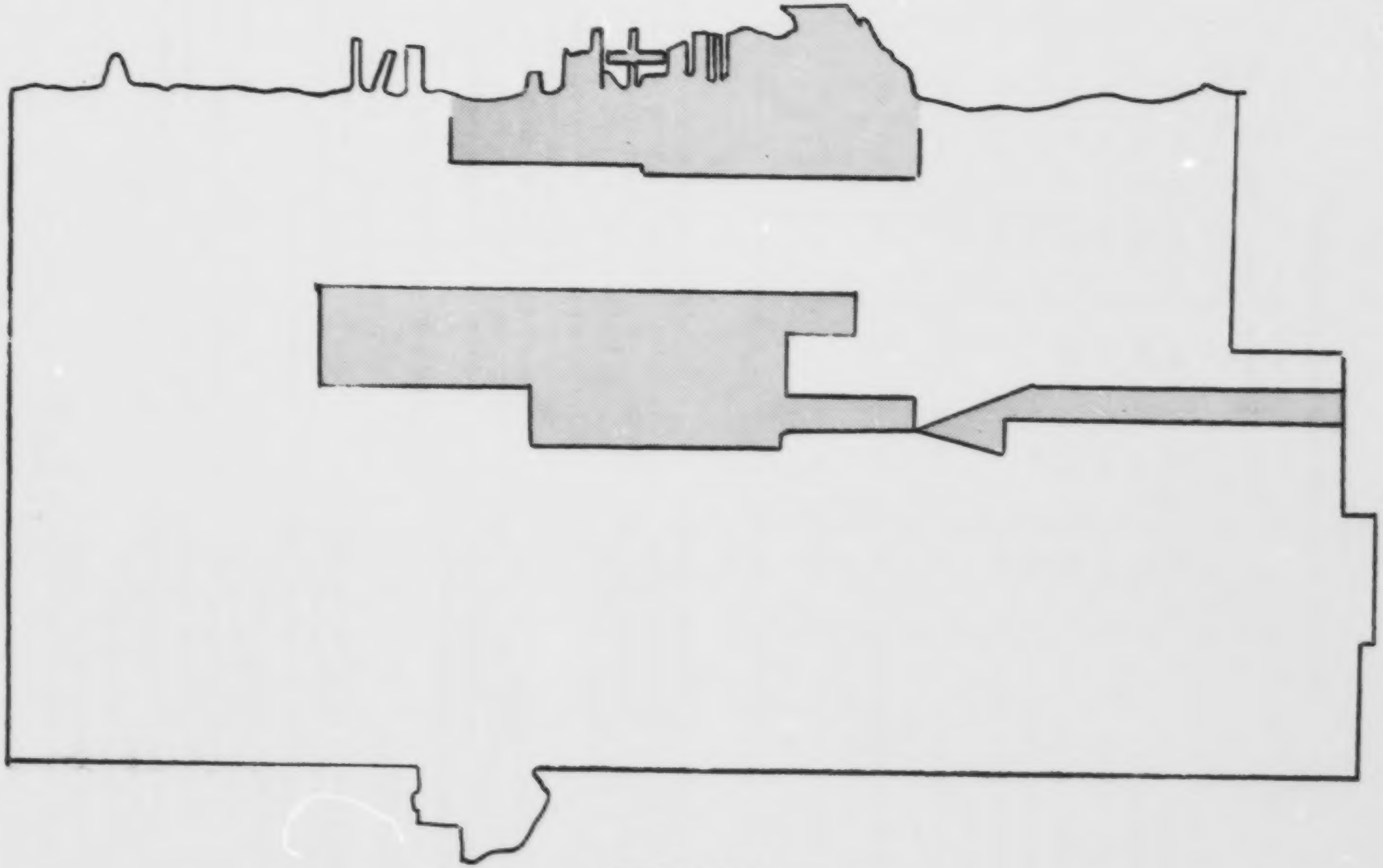


CHART NO. IV

*Federal Works Agency,
Public Blds. Administration



CITY OF ERIE

SLUM and BLIGHT AREAS - 1965

MAP.NO. 1

TABLE IV

CITY OF ERIE
POCKETS OF BLIGHT AND DETERIORATION[7-8]

	Pocket #1	Pocket #2	Pocket #3	Pocket Totals	Total City	Percent of City
Population	12,706	11,802	4,601	29,109	138,440	21
Dwelling Units	3,790	3,994	1,036	8,820	45,920	19
Dilapidated Units	385	424	11	820	2,835	29
Deteriorating Units	960	1,069	292	2,321	5,647	41
Adult Arrests (1962)	97	88	9	194	396	49
Juvenile Crime Cases (Jan. -June '65	70	50	14	134	274	49
T. B. & V. D. Cases (July '64 - July '65)	60	30	7	97	154	63
Secondary School Dropouts (Sept. '64 - June '65)	43	30	20	93	258	36
Fire Cases (Jan. - Mar. '64)	48	17	8	73	256	29

The over-all disease rate within the slum and blight areas is presently 4.78 cases per 1,000 population, which is 290 percent greater than the City average rate of 1.65 cases per 1,000 population. (See Chart V)

In reviewing areas of the county that are under consideration for renewal funds, and areas considered by officials of the community to be blighted, the following information is available:

Proposed Renewal Areas

Corry: approximately one-fifth of the area of the city located in the southwest corner of the community is being considered for renewal funds. The area is bounded on the north by the Erie Railroad, on the east by Center Street, on the south by High street, and its projection to the west, and on the west by Union Street. Approximately 35 square blocks of business and residential areas will be redeveloped. There are 250 residential and 10 business or commercial structures in the area. Approximately 100 residential and 300 business or commercial structures will be demolished.

Union City: approximately one-third of the area of the community is being proposed for redevelopment. The structures in the area south of the Erie Railroad, within the borough limits are being considered for renewal. About 30 blocks, or 81 acres, containing 329 residential and 16 business or commercial establishments are being considered for renewal. Approximately 60 residential units are being considered for removal.

Considered to be Blighted Areas

North East Borough: a small section east of Washington and north of Grahamville Streets, containing about ten residents, is in need of rehabilitation or removal.

Wesleyville: blighted and deteriorating areas of Wesleyville are shown on Map #1. Structure wise, there are 930 or 89.7 percent sound units; 102 or 9.8 percent deteriorating units, and 4 or 0.5 percent dilapidated units.[9]

ERIE'S SLUMS ARE COSTLY.*

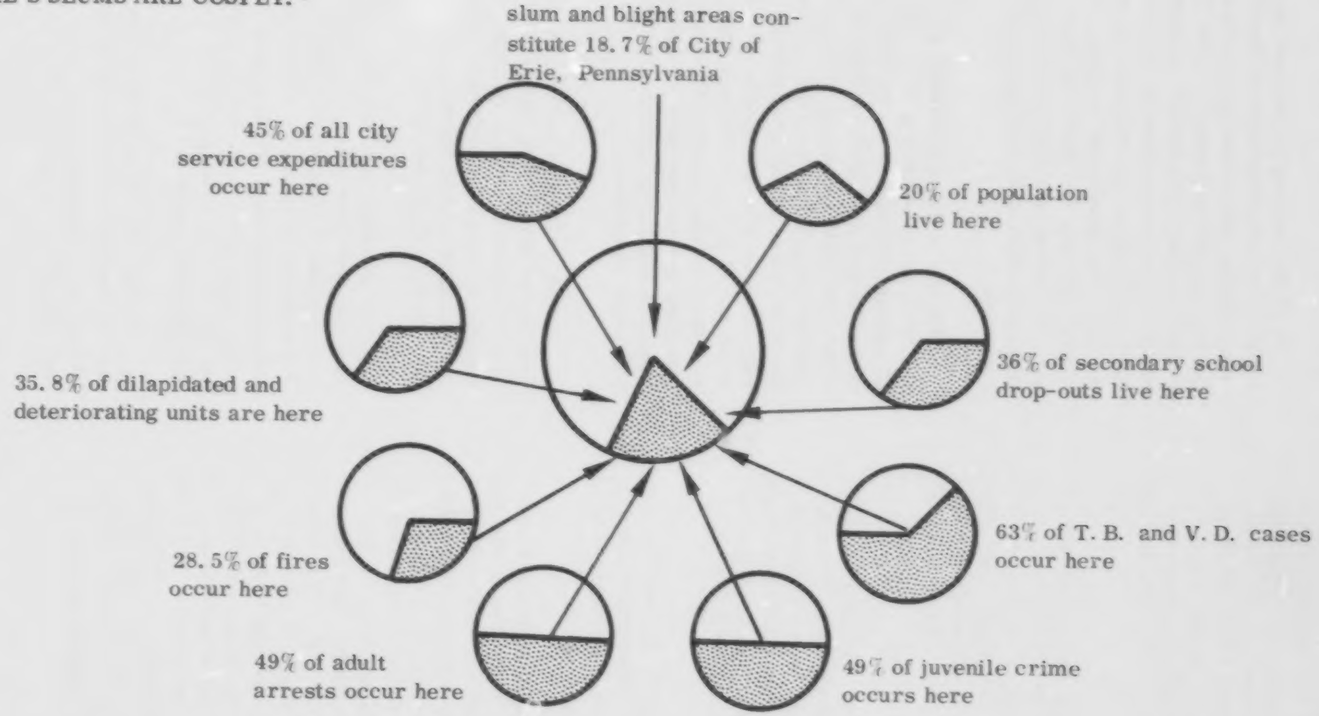


CHART NO. V

*Greater Erie Anti-Poverty Action Committee
*City Planning Commission

Millcreek Township: according to the 1960 census, Millcreek Township has 7,765 or 88.7 percent sound units, 708 or 8.1 percent deteriorating units, and 280 or 3.2 percent dilapidated units. The census information does not indicate location of the dilapidated structures, but from the information and population growth in the township since the 1960 census, it is apparent that blighted areas do exist and should be looked into.

Lake City Borough: Map #3 indicates the location of blighted and deteriorated area in Lake City Borough. Lake City has 484 or 89 percent sound housing units, 56 or 10 percent deteriorated units, and 4 or 1 percent dilapidated structures. A program of rehabilitation might be in order in this community.[10]

Girard Borough: Map #3 also indicates the blighted and deteriorated areas within the community. Girard Borough has 706 or 94 percent sound housing units, 43 or 6 percent deteriorating units, and 2 dilapidated units. A program of rehabilitation would also be in order in this community.[11]

Harborcreek Township: in the township there are 2,665 or 92.9 percent sound housing structures, 168 or 5.8 percent deteriorated units, and 34 or 1.3 percent dilapidated units.[12]

Albion, Waterford, Fairview Boroughs and Lawrence Park Township: at the time of this report, definite information was not available on the above communities, although it is known that an area of Waterford containing about a dozen homes is blighted, and should be given consideration in any over-all renewal program. It is further emphasized that except for Millcreek Township's recent passage of a plumbing code, there are no building, plumbing, or electrical codes in existence, with the exception of the City of Erie in Erie County. As a result, reputable builders have to compete against substandard construction in many areas of the county. The homeowner should be encouraged to do work himself. However, the desire to accomplish something should not overshadow good construction. Initial poor construction breeds blighted areas and finally total dilapidation.

HOUSING CODE ENFORCEMENT

In 1958 a housing division was established within the Health Department of the City of Erie, Pennsylvania, and a housing code was adopted by the City Council on August 8, 1959. This code containing fifteen (15) articles on housing and rodent control was updated by Council in 1964. With its adoption, one inspector and one secretary were assigned to the division. In 1960, a second inspector was hired and three additional men were added in 1964, to bring the division to its present staff of five (5) inspectors and one (1) secretary.

The City's Housing Division includes both the enforcement of housing codes and the control of rodents and pests within the homes and properties. It also investigated complaints concerning refuse and trash violations, as well as yard and junk car complaints, and alley surveys. Although the emphasis is on the housing problem with the city, considerable time is spent investigating these varied and miscellaneous calls. The division has also been asked to make storefront inspections in downtown area in conjunction with "clean-up and fix-up" campaigns, and investigate all rodent complaints.

During this period the Erie County Health Department was formed, and from its inception it has not been involved in housing. An occasional complaint would be investigated, but this usually involved garbage and refuse or rodents, and not the structure or its condition.

The townships and boroughs, while interested in fallen-down structures, would not pass housing laws to make it possible to condemn structures. When houses by American Public Health Association standards were evaluated as a safety hazard, recommendations to the county commissioners for removal and placing a lien on the property brought little result.

During the past seven years, the City's housing problems have been given considerable attention and concentration. Urban renewal and redevelopment projects have been initiated with the financial aid of state and Federal programs. Since 1958, the housing division has made 20,934 inspections and reinspections concerning housing and rodent control. It has continually inspected and baited City-owned properties for rodents, and is also responsible for pigeon control. In 1965 the housing inspectors operated a pigeon control program from February 1, 1965 to June 1, 1965, in which 1,300 pigeons were trapped and eliminated.

The following statistics show the housing code enforcement activity for the City of Erie, Pennsylvania, from 1958 through September 1965.

The Code provides the Housing Division with definite legal alternatives against any party refusing to comply with the orders issued by the Housing inspectors. After the determination of existing Code violations, the inspectors must then issue a written notice to the responsible party, ordering compliance within a specified date. Following a reasonable length of time, during which there was no effort to comply, the party may then be ordered to appear before the Director of Health to show cause as to why the structure or property should not be put in a safe and sanitary condition and he may order compliance within ten (10) to twenty (20) day period. If the person or persons, fail to comply with the Director's order, prosecution proceedings will be initiated before a magistrate or alderman; and upon conviction, fines of up to three hundred dollars ($300.00) or sentences of ninety (90) days in jail, or both, may be levied.

The code also provides for a Board of Code Appeals consisting of seven members appointed by the City Council. It is the duty of the Board to hear appeals from any person or persons wishing to appeal the decision of the inspection official. It may then uphold or reverse the Housing official's decision or modify any order, requirement, or decision in any way not contrary to the public interest, while still achieving substantial justice for all parties concerned.

In addition to the housing code, the City also has enforceable plumbing, building, fire, electrical, and zoning codes, all of which are a necessity in planning, developing, and rehabilitating a community. The City fire prevention program has been effectively enforced by the use of a sound fire code. The plumbing code requires that only licensed plumbers he allowed to operate within the City through the submitting of job plans prior to commencement, and subsequent inspection and approval after completion. All additions and alterations to commercial and residential structures require a building permit under the provisions of the building code. Many of these codes have not been revised in a number of years and modern advancements in technology would seem to indicate a need for review and up-dating of the codes.

Cooperation among the various code enforcement personnel has been noteworthy in past years. Team inspections involving the various divisions are utilized when violations of the several codes are present. To better acquaint the inspectors with the general provisions of all codes, "Inservice Training Programs" have been initiated in 1964 and 1965, recruiting noted authorities in each field to lecture to the code enforcement personnel and award "Certificates of Achievement" with the program's completion each year.

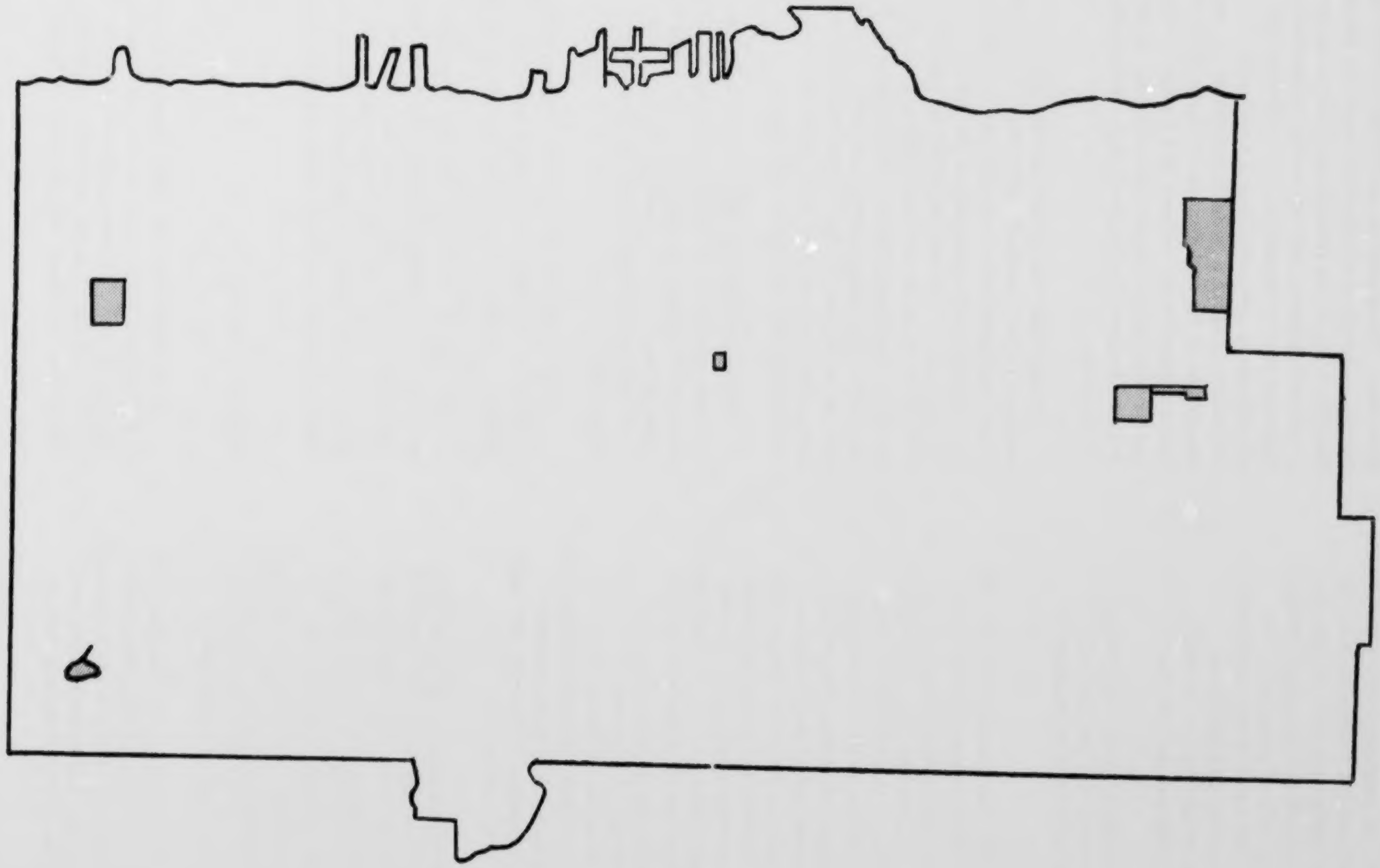
Of the five housing inspectors in the City, four are actively engaged in surveying the 30,000 dwelling structures in the city. This relegates 7,500 dwellings per inspector, or approximately 6,500 dwellings in excess of recommended standards.

In the county there are no codes pertaining to plumbing, housing, electrical work, or building. Therefore, little or no enforcement takes place. The county sanitarian recognizing a health hazard due to the absence of vacuum breakers in plumbing, improper venting, cross-connections, etc., will comment. However, unless it concerns a commercial, public, or licensed establishment, little can be done to get corrective action if the owner fails to make suggested changes.

PUBLIC HOUSING

Erie County has six public housing projects at the present time, all of which are located within the City of Erie.* These projects are under the direction of the Housing Authority of the City, which was organized as a public body headed by

*See Map No. #4.



CITY OF ERIE

ERIE PUBLIC HOUSING AREAS

MAP No. 4

one executive director and secretary. The total public housing units number one thousand, two hundred, and ninety-one (1,291) with two hundred more in the planning stages. These new units will be designed specifically for elderly persons and will be contained in a new high-rise apartment building, to be located near the downtown shopping district. The majority of the units are two-bedroom dwellings numbering 693, with three-bedroom dwellings second, totaling 304, followed by 195 one-bedroom units. The remaining ninety-nine units are divided among efficiency, four-bedroom, and five-bedroom units.

Table VI statistics show the breakdown of units within each public housing project. Projects PA 13-1 through PA 13-5 are low-income families totaling one thousand and eighty-six (1,086). Project PA-4 is for limited income families numbering two hundred and ten (210) units, while Project PA 36023 does not have an income limit. However, the Housing Authority does give preference to the families in the low-income group.

Except for the proposed two-hundred (200) dwelling unit high-rise apartment projects for the elderly, there are no immediate future plans for new public housing. The Authority does foresee a definite need for additional units for the elderly and hopes that this proposed project will give some indications of the number of future units that will be necessary to meet the needs of Erie's increasing older population. Should additional non-elderly housing be needed as a result of redevelopment, highway construction, or code enforcement, the Housing Authority will program units to meet this need. It will cooperate with the community by presenting any requests to the Federal Government for additional public housing units considered necessary due to a community planned program of redevelopment or neighborhood rehabilitation, which will result in numerous relocations of families and individuals.

ERIE REDEVELOPMENT AUTHORITY

The Redevelopment Authority of the City of Erie (E. R. A.) was established by the City Council on July 26, 1955, and following the appointment of five citizens to serve as members of the Authority, began its first Erie renewal project. Since then, much has been accomplished by the E. R. A. staff which has shown great initiative, creativeness, and foresight into the problems facing the community.

To-date, the City has initiated four renewal areas covering a total area of 302. 85 acres at a total estimated cost of $28,683,598.87. The first project, known as the Peach-Sassafras Urban Renewal Area, covering 37 acres, was completed in June 1964, with a gross project cost of $4,829,546.87. This project eliminated a major blight area from the Erie scene and replaced it with a modern shopping and recreation center, motel and restaurant, and a professional service building, plus many more new enterprises.[14]

The Liberty-Sassafras Renewal Project, E. R. A.'s second venture, has completed its demolition phase and can now begin new constructions. Twenty-three of the thirty-two acres of land purchased is available for industrial expansion and employee parking. The remaining sixty-three acres will be used to house new industries and provide additional off-street parking. It is estimated that this project will increase job employment by 1,000 and protect the existing 1,000 positions, plus increase the assessable property value by $850,000. The estimated gross project cost is $5,862,616.00.[15]

The third project known as The Central City Area - General Neighborhood Renewal Plan, comprises 114 acres of land located within the heart of the downtown shopping center. The project which is commonly called the Downtown Urban Renewal Area, is in the advanced planning stage and is divided into four separate projects to be completed in various stages. This plan represents a bold new concept in planning, cooperation, and action for the physical and economical rejuvenation of downtown Erie. The economic strength of virtually every downtown area in the Nation is being dissipated by traffic clog, insufficient parking, obsolete buildings and buildings in disrepair, declining property values and age and neglect of structures. Locally, the downtown section is steadily declining and many vacant buildings attest to the slow death that Erie's shopping area is experiencing. It is estimated that every shopper spends an average of $10. 00 per visit. Each additional 100,000 visits, then spurred on by the downtown improvement plan, will mean an additional one million dollars in

TABLE VI

CITY OF ERIE
PUBLIC HOUSING PROJECTS [13]

		Eff.	1 BR	2 BR	3 BR	4 BR	5 BR	TOTAL
Harbor Homes	(PA-13-1)	--	64	80	65	24	--	224
Lake City Dwellings	(PA-13-2)	--	10	22	6	2	--	40
Franklin Terrace	(PA-13-3)	--	76	300	124	--	--	500
Harbor Homes Annex	(PA-13-4)	*6	*6	--	48	36	26	122
Proposed	(PA-13-5)	--	*200	--	--	--	--	200
Erie Heights	(PA-4)	--	20	170	20	--	--	210
Delaware Place	(PA36032)	--	19	121	50	5	--	195

* Specially designed for the elderly.
Housing Authority of the City of Erie, Erie, Pennsylvania

increased sales volume. To accomplish this feat, an estimated $18, 011, 436 will be necessary in project costs. [16]

The fourth plan is the Bayfront Urban Renewal Plan, which is in very early stages of planning compriisng 65. 5 acres of land, at this time no project cost estimates are available. The success of this plan depends upon the feasibility of accomplishing the following:

1. Proposed expansion of the County Government facilities located in the County Court House.
2. Proposed expansion of Gannon College Facilities.
3. Proposed new off-street parking facilities.
4. Proposed new Bayshore Expressway to run through this area.
5. Proposed rehabilitation of the residential areas.

It should also be noted that an eight-man relocation service has been established to aid families and enterprises residing in renewal areas to find new and suitable residences. It is the goal of the E. R. A. "to relocate families from substandard conditions to decent, safe, and sanitary housing in a desirable neightborhood environment, and also to stop neighborhood decline, improve residential structures, prevent further blight and deterioration, stabilize property values, and promote healthful neighborhood growth and development. " (See Map No. 5)

FEDERAL FINANCIAL ASSISTANCE

Housing and Urban Development Act of 1965

Federal financial assistance for local, general, and concentrated code enforcement program and for "spot" demolition of unsafe and non-inhabitable structures should be utilized to the fullest extent. On August 10, 1965, President Johnson signed the Housing and Urban Development Act of 1965, which contains two new and very important provisions for local code enforcement officials. Section 116 "Demoliton" and Section 117 "Code Enforcement".

Section 116 is a "spot" demolition program which authorizes a grant program of 66 2/3 percent or 75 percent, depending upon population, to cities, municipalities, or counties to demolish unsound structures or structures which are unfit for human habitation. It has been termed "spot" demolition because its primary aim is the elimination of bad structures located within good neighborhoods. Legally, this new section has been interpreted on a broad scale, to include the demolition of unsound commercial and industrial structures, as well as the demolition of derelict structures in some of the more depressed areas of a community.

Structures to be demolished under this section are to be located inside our outside an established urban renewal area, and the following requirements must be met:

1. The community must have authority under state or local law, to demolish these structures.
2. The community must have a Workable Program for community improvement, which means that the community must file a yearly report with the Federal Government describing the progress made in community improvement, including the five (5) enforceable codes, over-all comprehensive community planning, implementation of an over-all community plan, and citizens' participation.
3. The proposed demolition will be on a planned neighborhood basis and will further the over-all renewal objectives of the municipality.
4. The community must have a program of codes including building, electrical, plumbing, housing, and fire prevention codes which are being enforced.
5. The structures to be demolished must constitute a public nuisance and a serious public health or welfare hazard.
6. The community must have exhausted all available legal means to secure remedial action.

The community also has the responsibility to relocate those families, individuals, and business concerns whose homes and buildings were demolished and to accomplish this, there are 100 percent federal grants available to pay for the fair moving costs.

Since this is an annual program, the community can file an application each year listing the number of structures to be razed in the coming year. No demolition is allowed in areas scheduled as urban renewal projects within three years. However, local officials may demolish the worse structures in areas that will become renewal projects in three to five years, and then do minimum code enforcement in these sections until renewal begins.

Section 117 concerning code enforcement, is a totally new program establishing direct grants to cities, other municipalities and counties to assist concentrated code enforcement activities. The Federal Government allocates 66 2/3 or 75 percent of the costs, and local government contributes 25 percent or 33 1/3. Applications are made on a three year basis covering as many areas as local officials believe they can finish during this period. The requirements are similar to those of "spot" demolition, and are as follows:

1. The community must have all required codes necessary for proper code enforcement.
2. Code enforcement grants cannot be substituted for expenditures already being made for code enforcement activities in the community.
3. The community must have a program to provide any needed public improvements in the enforcement areas, such as schools, parks, playgrounds, etc.
4. The community must relocate families, individuals, and business concerns who are displaced through code enforcement activities.
5. The selected areas must be predominately residential, at least 51 percent, and these residences must be distributed throughout the area.
6. At least 20 percent of structures located in the selected area must have code deficiencies according to the local codes.

No restriction will be placed on the type of area, good or blighted, to be covered under this program. There are relocation grants available to the municipalities to cover the entire cost of relocation payments to eligible families, individuals, businesses, and non-profit organizations that are displaced by the enforcement program. Direct Federal rehabilitation grants, not exceeding $1,500, are also available to families and individuals for repairs and improvements necessary to conform to applicable code requirements. In addition, direct Federal 3 percent loans can be obtained for repairs and rehabilitation of structures in the selected code enforcement areas.

Grants under the code enforcement program as stated in the 1965 housing bill will cover all the normal costs of code enforcement, including hiring and training of new inspectors, administrative overhead, printing of forms and additional manpower to aid families relocate or assist them in loan applications and arrangements for repairs on their properties. It also provides for limited funds to aid the costs of public improvements, such as streets, curbs, gutters, sidewalks, traffic lights, street name signs, publicly-owned street lighting and street tree planning. The Federal grants and loans available under Sections 116 and 117 can play a vitally important role in reshaping the face of a community and should not be overlooked by any community interested in providing its citizens with a better, safe, healthier place to live. See Map No. 6.

DEFINITIONS

1. Blight: Deterioration or decay of a structure or area relative to physical condition or appearance.

2. Concentrated Code Enforcement: Systematic door-to-door type inspections of dwellings and structures for possible Housing Code violations.

3. Deterioration: A condition of dwelling with defective components which need more repair than would be provided in a regular routine maintenace program. A dwelling with defective components will not continue to provide safe and adequate shelter if these defects are left uncorrected. Defects are signs of neglected maintenance which lead to serious structural damage if not corrected.

4. Dilapidation: A condition of dwelling with defective components which would require extensive repair or rebuilding or the razing of the structure and which does not provide safe and adequate shelter or endangers the health, safety, or well-being of its occupants.

5. Dwelling: Any building or structure, except temporary housing, which is wholly or partially used or intended to be used for living or sleeping by human occupants.

6. Dwelling Unit: Any room or group of rooms located within a dwelling and forming a single habitable unit with facilities which are used or intended to be used for living, sleeping, cooking, and eating.

7. Garbage: The animal and vegetable waste resulting from the handling, preparation, cooking, and serving of food.

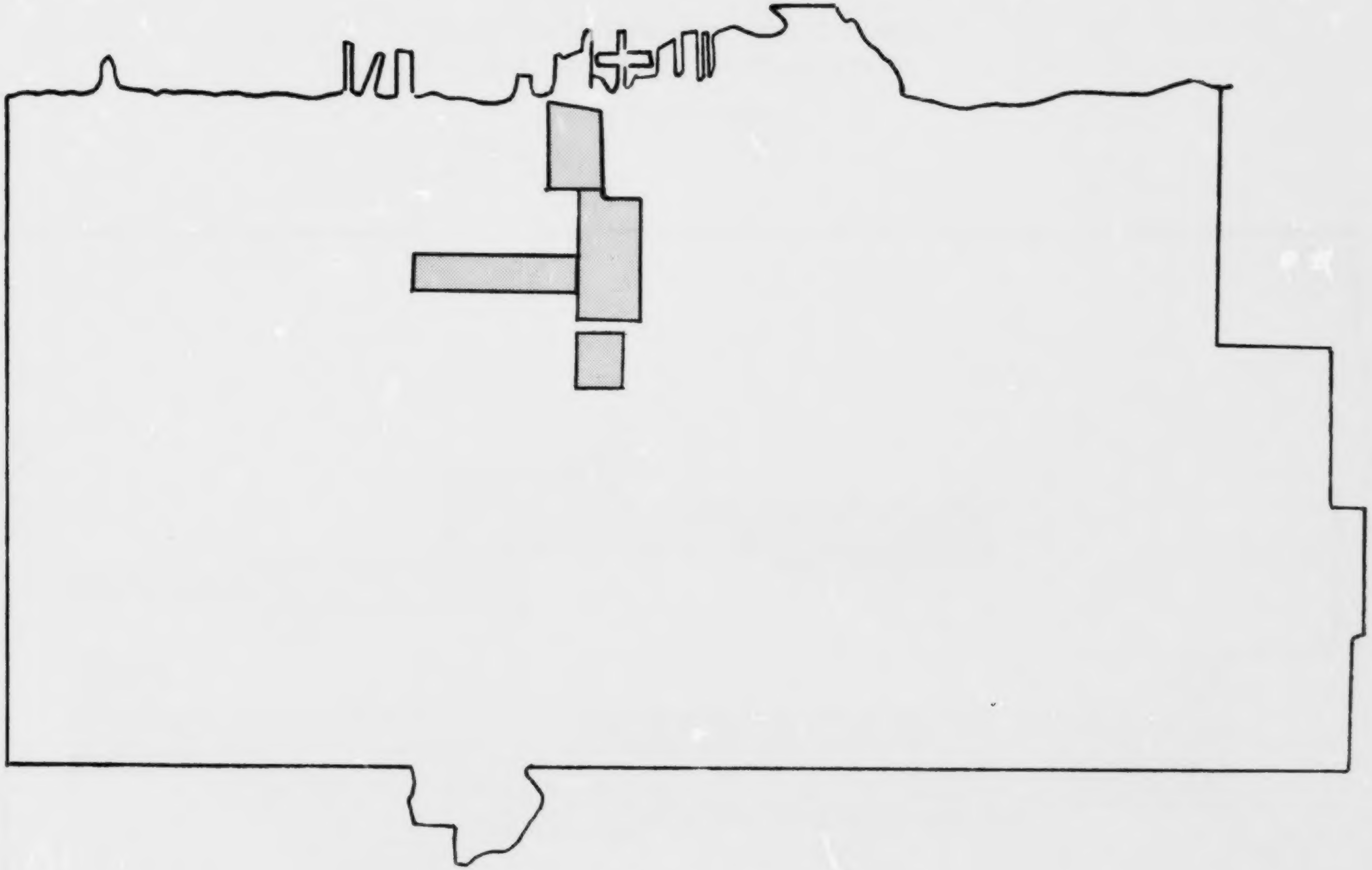
8. Multi-Family Dwelling: Any dwelling containing three (3) or more dwelling units.

9. Rubbish: Non-putrescible solid waste consisting of both combustible wastes, such as paper, cardboard, plastic containers, yard clippings, and weeds; and non-combustible wastes, such as tin cans, glass, and crockery.

10. Slum Area: An area or neighborhood where all or the majority of, the structures or dwellings are without required facilities or are in a general state of disrepair.

11. Sub-Standard: Does not meet Housing Code requirements relative to physical condition of structure and required facilities.

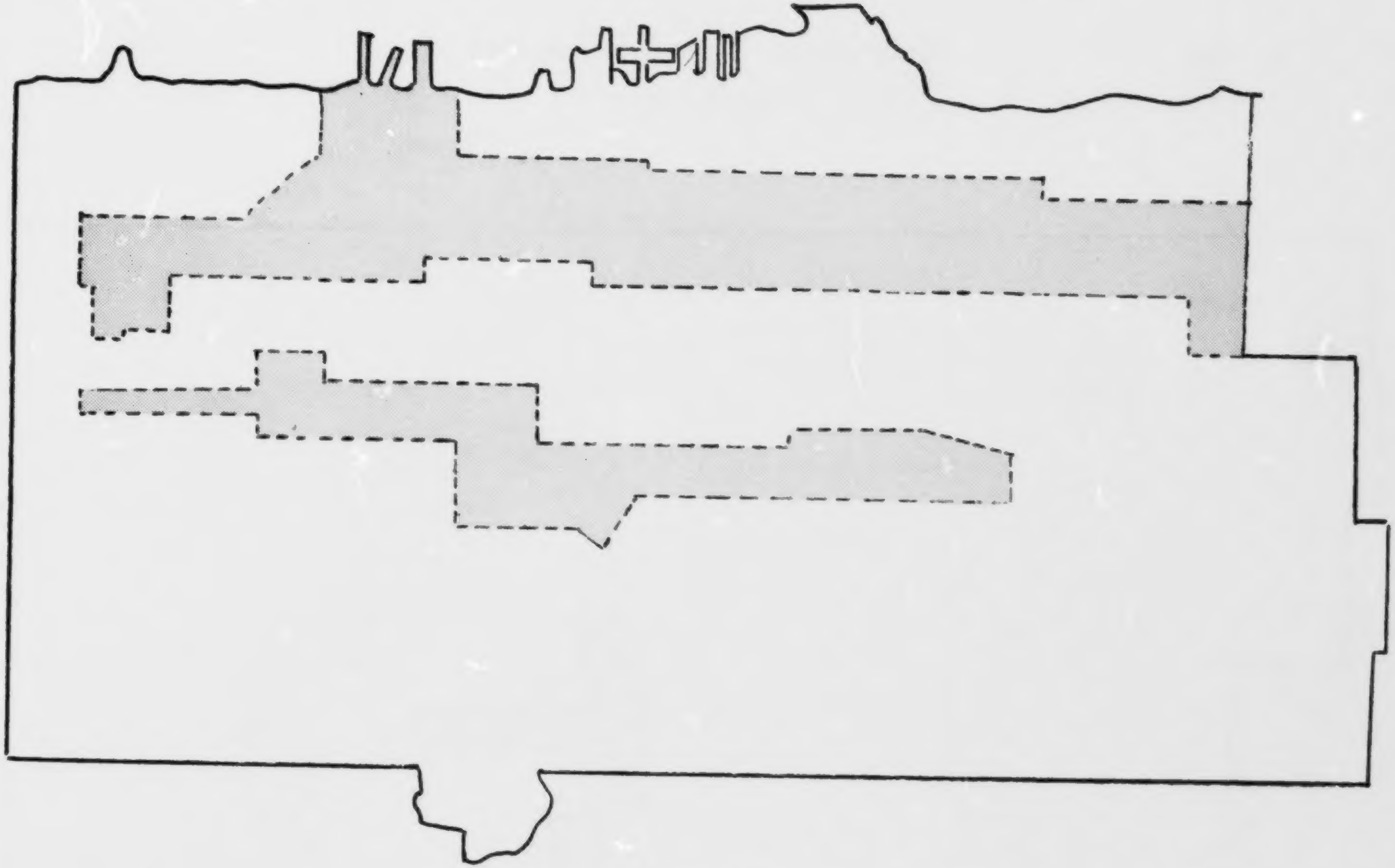
12. Uninhabitable: A dwelling, dwelling unit, or living unit which does not provide safe, decent, and sanitary housing because of lack of required facilities or because of basic or numerous deficiencies.



CITY OF ERIE

ERIE REDEVELOPEMENT PROJECT AREAS

MAP. NO 5



CITY OF ERIE

PROJECTED SLUM AND BLIGHT AREAS
IF NO CONCENTRATED CODE ENFORCEMENT
PROGRAM WERE IN EFFECT

MAP No. 6.

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9. Erie County Planning Commission Master Plan Report for Wesleyville.
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11. Erie County Planning Commission Master Plan Report for Girard Borough.
12. Erie County Planning Commission Master Plan Report for Harborcreek Township.
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14. Redevelopment Authority City of Erie Annual Report, 1965.
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RECREATION

PRESQUE ISLE STATE PARK

ERIELAND 2000

RECREATION COMMITTEE

INTRODUCTION

The conservation, development, and wise use of outdoor recreational resources are of great importance in satisfying the social and health goals of our population. Expanding leisure time, growing interest in outdoor recreation, increased mobility of people, and rising standards of living, make it possible for more people to seek and utilize recreation areas.

The term "recreation area" refers to land and water areas dedicated to the enjoyment of the public. These developments generally involve facilities operated by a public agency, concessionaire, or voluntary or private groups or individuals, and include parks, campgrounds, shelters, picnic areas, travel trailer parking areas, resorts, motels, hotels, cabin camps, organizational camps, marinas and other facilities relating to a variety of activities -- swimming, fishing, hunting, boating, sailing, hiking, picnicking, camping, touring, and sightseeing.

Attention to the environmental health aspects of recreational problems has been stimulated greatly by the increasing demand for outdoor recreation.

In many instances the planning, provision, and maintenance of facilities in recreational areas have not kept pace with this rapidly increasing visitor load. As a result, optimum use of such areas is not possible and deterioration of overtaxed facilities is frequently encountered. Where facilities, such as water supply, sewage disposal, and refuse handling are inadequate or totally lacking, the visitors will fend for themselves, often creating conditions which are grossly insanitary, as well as creating serious environmental health hazards for themselves and neighboring community residents. Available recreation facilities in 1960, even though currently considered inadequate by many authorities, will need to be tripled by the year 2000.

Estimates are that adequate environmental health safeguards comprise approximately 30 percent of development costs of new recreation areas, therefore investment in adequate and efficient facilities is justified from the economic standpoint.

Experience has demonstrated that whenever a large number of persons are concentrated in one place, health problems are accentuated. The increasing number of visitors to recreational areas creates a need for planning and constructing adequate health-related facilities, as well as to educate the public to observe good sanitary and personal hygiene practices. The need for continuing research and studies to develop improved standards and solutions to environmental health problems peculiar to recreation areas and activities should be recognized.

In recognition of the stated relationships between recreation and public health, and in order to obtain maximum health protection among the population from environmental health hazards in outdoor recreation areas, it is urged that all Federal, State, and local public or private agencies, groups, or individuals having responsibility for the planning, development, design, operation, or maintenance of recreation areas apply high standards of public health and sanitation in the administration of and supervision of their programs. A high level of performance in this regard can be facilitated by maintaining close cooperation and consultation with health and sanitation authorities.

ERIE COUNTY'S PARKS

The changes in our society over the last twenty years have created a significant demand for outdoor recreation facilities. This demand is growing at an even faster rate than our population and is a result of people having more leisure time, greater mobility, and higher family income. Erie County residents need new areas close to home, where they can enjoy the simple pleasures of walking, sightseeing, picnicking, being in a crowd, or wandering along.

While more specialized sports, such as boating, golf, camping, and particularly winter activities, are becoming increasingly popular in the County; State and City parks cannot be expected to satisfy the existing or future demands. It, therefore, becomes the responsibility of the County to provide new outdoor recreation opportunities that will both enhance the natural beauty of the County and ensure the welfare of its people.

Erie County has taken a significant step in assuming this responsibility. The six parks included in this report represent the initial acquisition and development of a County-wide system of open spaces and outdoor recreation facilities. These parks have a combined area of 1,500 acres ranging in size from one acre to five hundred acres.

Several natural and man-made forces have influenced the arrangement of this new park system within the County's pattern of growth. Among these forces are urban growth, transportation routes, tourism, and the land, water, and wildlife resources.

The intensely urbanized area in the immediate fringe of Erie County contains 75 percent of the County's residents--or approximately 325,000 people -- will live within this area. The configuration of urban area and fringe lies north of Interstate 90, extends east to Northeast Township, and west to Girard and Lake City. It is along this fringe that four of the park sites are located. The two remaining parks are located near the populated areas of Edinboro, Lake City, and Girard. Established early, these parks can favorably influence the kind and quality of adjacent land development.

The landscape of Erie County is characterized by a lake plain paralleling the lake and extending inland five to six miles. Within this plain, most of the urban growth and transportation system have occurred. Sofe sedimentary rocks have permitted the many creeks flowing into the lake to incise deep, wooded ravines in the otherwise level terrain. All but one of the new County parks are situated along these creeks. The complete separation of these ravines from the surrounding land permits natural wilderness corridors to exist adjacent to the densely populated areas. Two park sites enjoy both the closeness of the ravines and the open landscape of the lake bluffs and shoreline.

Water is basic to all the parks; at Shades Park and Raccoon Creek Parks, it is Lake Erie, while at the other parks it is the meandering creeks. In all of the parks, water is used passively--to sit by, walk along, or cross over; however, at Raccoon Creek Park, beach swimming is possible.

There exists within the parks today a natural balance of wildlife and plant species. Park development, necessary to accommodate large numbers of recreation enthusiasts, must also consider how this balance can adept to change. Excellent opportunities are available for nature study and consideration of education programs. A place for nature--for the natural habitats of birds, mammals, aquatic life and plants--can best be preserved in the County parks for the next generation.

EXISTING COUNTY PARKS

Raccoon Creek - 200 acres - Springfield Township

The park is on the Lake Erie shoreline located in the western part of Erie County. The facilities already located on this site are flush toilets, well, electricity, trailer court, and summer cabins.

Shades Beach - 400 acres - Harborcreek Township

The park is also located on the Lake Erie shoreline, in the eastern part of Erie County. The facilities already found on the site are flush toilets, city water, electricity, concession stand, kitchen, picnic grove, shuffleboard courts, dance pavilion, and parking area.

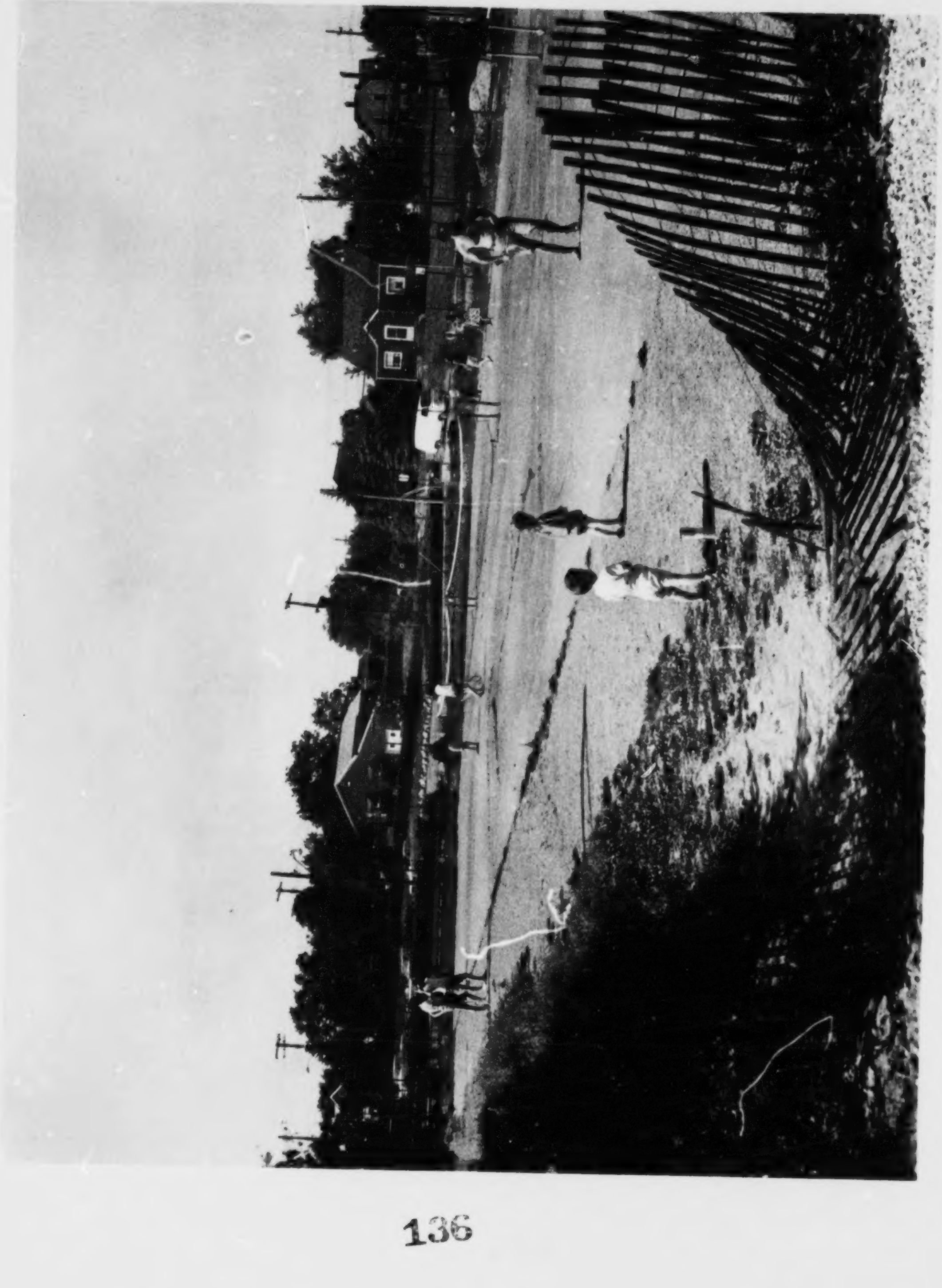
Six Mile Creek - 400 acres - Harborcreek Township

The area is located south of Interstate 90 and lends itself to the natural rugged outdoor setting with its many trees and ravines overlooking the

RECREATION

WADING POOL

SANDLOT BASEBALL



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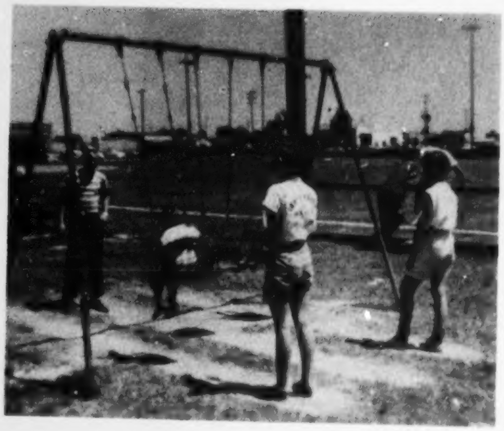
GUIDE ROPES - FRONTIER PARK



---TOT PARK

PICNIC AREA ----

---INDOOR ACTIVITIES
(WINTER)

OUTDOOR RECREATION - CAMPING ----

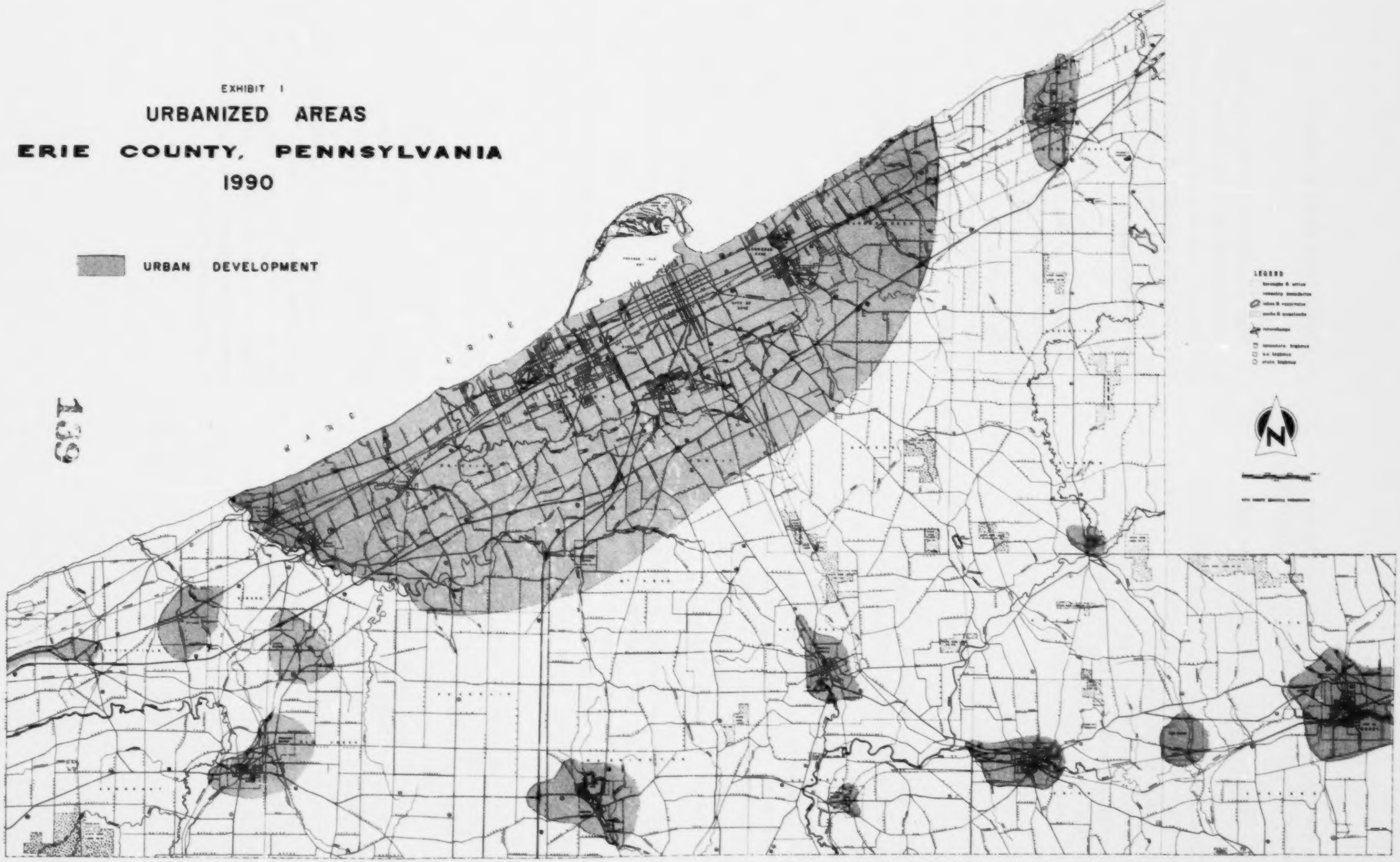
EXHIBIT I

URBANIZED AREAS

ERIE COUNTY, PENNSYLVANIA

1990

▨ URBAN DEVELOPMENT



LAKE ERIE
LEGEND
boroughs & cities
township boundaries
lakes & reservoirs
parks & gamelands
interchange
interstate highway
u.s. highway
state highway
N

creek bottom. This has just been purchased, therefore, contains no development at this time.

Edinboro Lake - 1 acre - Washington Township

This peninsula is located north on Edinboro Lake, which is already a major attraction in the southern part of Erie County. It is one of the last remaining parcels of land under private ownership and free from commercialism or residential use. This has also just been acquired, therefore, development is still in the planning stage.

PROPOSED COUNTY PARKS

Some 6400 acres of regional parkland will be needed in Erie County by 1975, and a total of 9,400 acres by 1985. Our proposed recommendations, found in the Erie County Open Space Plan, if implemented, would create a park system capable of serving Erie County's park needs to the year 2000. Reasons for this need are population growth, more leisure, shorter work days, better income, better transportation, and a desire to escape the hustle of the city.

Recent studies on the type of recreation preferred indicate it is water oriented activities. The growing importance of water based recreation has, to a large degree, influenced the type of recreation facilities to be provided in Erie County.

In proposing park locations from the County's Open Space Plan, the potential of developing water based recreation was of prime consideration. The shoreline of Lake Erie, the many creeks, possible dam sites, and the inland lakes in the County, are reflected in this plan. Other considerations in selecting the park sites were proximity to population centers, highways access and topography. Also, the location of State Game Lands influenced the choice of some park sites to enable the utilization of some of these game preserves in the proposed County parks system.

PRESQUE ISLE STATE PARK

The development of Presque Isle State Park is predicated on the Park Master Plan of 1957. The master plan is a planned development of park facilities with due consideration given to various use areas and the preservation of the natural aspects of the peninsula on which the park is situated.

The Master Plan is approximately 60% implemented and further construction will take place as needs warrant. It is significant to note that by the year 2000, the total plan should be complete and the park will be able to service 8 to 9 million visitors each year.

The development of Presque Isle State Park's potential and its use by the people, depends upon the quality of water in Lake Erie and especially in the waters adjacent to the Park. The park is a water oriented recreation area catering greatly to the bathing and boating segments. If the waters become polluted, then it is reasonable to conclude that the attraction of the Park will diminish and the economic effect on the Greater Erie tourist industry would be disastrous. It is therefore recommended that serious consideration be given to abate what pollution presently exists in Lake Erie.

The various needs and possibilities of Presque Isle State Park were considered by park planners.

CITY OF ERIE

Major Louis J. Tullio has earmarked $3.5 million of his $24 million Capital Improvements Program to be spent in improving the City of Erie's recreational facilities.

A new golf course, development of park sites, acquisition of sites for setting up small playgrounds for children, installation of swimming pools and ice rinks - all these improvements are provided for in the $24 million Capital Improvements Program.

Local cost of the projects, which are programed for the next five years, would be $1. 5 million. Funds would come from the sale of the water system, as explained by Major Louis J. Tullio.

The remaining cost would be covered by state and Federal grants, notably the state's Project 70 Land Acquisition Program, and the Federal Open Space Program.

Locations of some of the facilities will be determined after extensive planning. Other areas are already tagged for development.

It is hoped much of the work can be started early next year, depending upon approval of the Capital Improvements Program.

Acquisition of land for future park sites is well underway. The state has earmarked more than $150,000 in Project 70 funds for 10 areas, and Open Space funds have been applied for.

Four other locations will be chosen and these, too, will be covered by state and Federal grants. Total cost for acquiring 14 sites making up 230 acres, is expected to be $425,000.

Ten sites already picked for development as parks are: McClelland and Bird Drive, 26th to 31st; Brandes and Burton, 38th to 40th; 21st to 25th, Emerson to Baur; 29th to 31st, Schaper to Gerry; Ellsworth and Garden, if extended, and W. Grandview Blvd. ; 39th to E. Lakeview, Old French Road to Sunset.

Vicinity of East 43rd and Grandview, if extended, 32nd to 35th, if extended, Regis Drive to Zimmerman Road, vicinity of railroad tracks Broad Street and East 28th; Lake Front Drive and Queen Street, if extended, Pennsylvania Avenue and Dunn Blvd.

Once all 14 areas are obtained, $1.6 million, half to come from federal funds, will be spent developing the locations.

Another golf course will be developed at a cost of $150,000 with state and federal funds covering two-thirds of that amount.

A total of $900,000 will be spent on three swimming pools, to be built in the east, west, and south central areas of the City, about 40 tennis courts in 10 to 12 areas throughout the city, and several artificial ice rinks. Federal funds are available for half the cost.

"Tot lots", small play areas, will be provided for children living in the crowded sections of Erie. These will be developed largely on the sites of abandoned dwellings.

There are an estimated 35 to 40 such dwellings and plans call for spending $400,000 on the play areas, with federal money available for half the cost.

There are also plans to spend $1. 2 million in the next few years, on modernizing hundreds of intersections and installing blocks of tree-lined boulevards and curbs throughout the city.

The boulevard and intersection projects will be closely aligned with paving, and resurfacing programs anticipated in the $24 million Capital Improvements Program.

The intersection improvements will cost about $400,000 and be paid for with local funds obtained through the sale of the water system to an authority.

Half the $800,000 price tag of the boulevards program - which calls for trees and shrubbery to be planted and new street lights installed - will be covered by federal beautification funds. The other half will be paid for locally.

Rounded curbs have proved safer for motorists and much better for traffic movement than the outmoded square corners to be found on most of Erie's thoroughfares.

Present traffic flows and extent of deterioration to date, will determine which intersection will be improved first. The same criteria will be used in planning boulevard improvements.

Initial plans call for revamping the great majority of the intersections in the downtown area. About 500 crossings are considered inadequate by modern traffic standards.

Plans call for installing boulevards and new curbs along the following streets:

Fairmont Parkway, Elm to McClelland; East Lake Road, Payne to Franklin; Dunn Blvd., foot of Dunn to 2nd; East Avenue foot of East Avenue to 6th; 28th, Pennsylvania to Elm; 31st, Ash to East Avenue.

Ash, 28th to 38th; 38th, State to Wayne; Parade Boulevard, 38th to East Grandview; Sunset Boulevard, 38th to East Grandview, State from just south of 26th to the southern extremity; Liberty, 21st to 26th, Liberty, Front to 10th.

Tenth, Liberty to Pearce Park; Cranberry, 5th to 8th, Washington Place, 6th to 8th. Greengarden, 26th to 32nd, South Shore Drive; the Frontier area of West 6th; Kahkwa, 4th to 8th, Delaware, 8th to 12th; Beverly, South Shore to 8th; Shenley, South Shore to 8th.

Work on some of the areas is underway already, if not complete. Officials stress streets included in the above list do not reflect the limit of improvement plans.

Hopefully, work can begin early in 1967, assuming the capital improvements program is approved.

The possibility of local contributions in the form of trees, bushes, etc., for portions of the program, has not been overlooked.

Enclosed is a complete copy of Mayor Louis J. Tullio's $24 million Capital Improvements Program.

CITY OF ERIE

Department of Parks and Public Property

PARK FACILITIES

Pulaski	East 10th Street between Hess Avenue & Brandes Street	5.33 Acres
Burton	East 38th Street between Burton & Brandes	6.00 Acres
Franklin	Marne Road between 7th & 10th Streets	8.48 Acres
McKinley	East Avenue between 21st & 23rd Streets	5.00 Acres
Kosciuszko	East 12th Street at Wayne	4.07 Acres
Land Lighthouse	Lighthouse Street at Bayfront East	3.96 Acres
Glenwood	West 38th St., and Glenwood Park Ave., & Cherry Street	115.00 Acres
Chestnut	Foot of Myrtle Street at West Bay Front	Acres
Perry Square	State Street at North-South Park Row	4.14 Acres
Frontier	Seminole Dr., between West 6th & West 8th Streets	32.65 Acres
Reservoir	West Grandview at Cherry Street	10.23 Acres
Adams	West 34th Street, West of State Street	Acres
Roma Park	Zimmerman Road at East 35th Street	8.23 Acres
Wayne	East 6th at East Avenue	2.96 Acres
Griswold Plaza	Peach Street between West 13th & 14th Street	.87 Acres
Gridley	Liberty Street at West 6th Street	4.70 Acres
Washington	Brown Avenue at West 23rd Street	Acres
Garden (Pear Orchard)	Sassafras & Norman Way	1.325 Acres
McCarthy	Pennsylvania Avenue at East 2nd Street	Acres
Hillside	Sunset Blvd., at East 41st Street	4.0 Acres
Wallace	Wallace Street at East 2nd Street	3.18 Acres
Victory	Lincoln Avenue at West 13th Street	Acres
Bayview	West 2nd St., between Walnut & Cherry Streets	3.64 Acres
Columbus	West 16th St., between Poplar & Cherry Streets	2.01 Acres
Pebble Lake	West 27th Street at Washington Avenue	.66 Acres
Cloverdale	West 27th Street at Harvard Boulevard	1.27 Acres
Myrtle	West 19th Street at Myrtle	.64 Acres
Ross	East 3rd Street between Ross & Newman Streets	.80 Acres
Holland	East 16th & Holland Streets	Acres
East 19th	East 19th Street, East of Wayne Street	Acres
East 36th	East 36th Street at Wallace	Acres
East 35th	East 35th Street at Wayne	Acres
Whitley	Whitley Avenue between East 18th & East 19th Street	Acres
Marne	North of East 12th Street at Seneca	Acres
Avalon	West 6th & Pittsburgh Avenue	1.79 Acres
Zuck	Zuck Road & West Grandview Boulevard	20.00 Acres

PLAYGROUNDS AND POOLS

Glenwood - Wading Pool	38th & Glenwood Park Avenue
Pebble - Wading Pool	Washington & Coldspring
Lohse	27th & Gerry
Sunset - Wading Pool	41st & Sunset
Burton - Wading Pool	41st & Burton
Wallace	36th & Wallace
Kosciuszko - Wading Pool	13th & Wayne
Holland	16th & Holland
Downing - Wading Pool	18th & Downing
Gaskell	18th & Gaskell
McKinely - Wading Pool	21st & East Avenue
Wayne	19th & Wayne
Bayview - Wading Pool	2nd & Walnut
Columbus - Wading Pool	16th & Poplar
Victory - Wading Pool	13th & Lincoln
Myrtle - Wading Pool	19th & Myrtle
Cascade	3rd & Cascade
Franklin Terrace - Wading Pool	7th & Marne
Land Lighthouse	Ft. of Dunn Boulevard
Pulaski - Wading Pool	11th & Brandes
Wallace	2nd & Wallace
McCarthy	2nd & Pennsylvania
Ross	3rd between Ross and Newman
Chestnut Pool	Foot of Chestnut Street

CITY OWNED GOLF COURSES

Glenwood	West 38th & Cherry Shunpike Club House (9 Hole)	43.0 Acres
Downing	Troupe Road and East Lake Road Club House (18 Hole)	197.0 Acres
Erie	Golf Course Road near Edinboro Road Club House (18 Hole)	120.0 Acres

TENNIS COURTS

Glenwood	West 38th & Glenwood Park Ave., & Cherry St.	4 Surfaced Courts
McKinley	East Avenue between 21st & 23rd Streets	2 Surfaced Courts
Bayview	West 2nd Street between Walnut & Cherry Streets	2 Surfaced Courts

PROJECT 70 SITES

Site #1	Sixth Ward Between Emerson Avenue & Bauer Lane - 25th to 21st West	17.62 Acres
Site #2	Sixth Ward Between Gerry Avenue & Westland Subdivision - 29th to 32nd	9.02 Acres
Site #3	Sixth Ward Between West Grandview Blvd., out from Allegheny Road	18.25 Acres
Site #4	Fifth Ward Between Old French Road and East 41st Street	6.59 Acres
Site #4A	Fifth Ward Beginning in the East Line of Old French Road and South-East 41st Street	11.34 Acres
Site #5	Fifth Ward Beginning at Euclid Avenue to City Line - up Alan Drive	8.93 Acres
Site #6	Fifth Ward Beginning at East 26th to 31st Streets off Mc Celland Avenue	58.00 Acres
Site #7	Fifth Ward Beginning with Southwest corner added onto area behind Jo Anna Connell School	7.62 Acres
Site #8	Fifth Ward Beginning at 28th & Tuttle to a little past New Street to tracks	16.00 Acres
Site #9	First Ward Beginning at the Foot of Pennsylvania Avenue & Queen Street to Land Lighthouse	1.88 Acres
Site #10	Fifth Ward Beginning at Burton Avenue to South line of East 38th Street	.01 Acre

ADDITIONAL SITES

1.	Water lots north of West Front Street between Walnut and Liberty Street	47.22 Acres
2.	An area between East 40th Street, if extended, and the south line of the Pennsylvania RR Company right-of-way, and between Brewer Avenue, if extended, and the East City Line.	13.16 Acres
3.	An area between East 38th St. Blvd., and Pine Avenue and between Wayne and Perry Streets, also known as City Index #5376-115.	3.69 Acres
4.	Some 497 ft. east of Site #3, north of West Grandview Blvd., and west of Allegheny Road.	13.43 Acres

MILCREEK TOWNSHIP

Millcreek Township is a second class township located in Erie County on the southern and western edges of the City of Erie. Millcreek comprises 29 1/2 square miles with an approximate population of 35,000. Millcreek should experience a steady population growth - 65,000 by 1985 and 80,000 plus by 2000.

EXISTING RECREATION FACILITIES

Nine Elementary School Playgrounds
Nine Elementary School multi-purpose rooms
One Junior High School athletic field
Two Junior High School auditoriums
Two Junior High School gymnasiums
One Senior High School athletic field
One Senior High School auditorium
Two Senior High School gymnasiums
Four tennis courts (school and park locations)
Two community parks (Asbury-owned by School District and Zuck-owned by City of Erie)
One outdoor swimming pool (Privately owned and commercially administered)
One eighteen-hole golf course (Owned by the City of Erie)
One Recreation Office (located in Municipal Building)
One Assembly Room (located in Municipal Building)

The Millcreek Township Recreation Commission's ultimate objective is to acquire lands and to construct facilities for the administration of recreation programs for the residents-all ages and interests-of Millcreek Township in the years ahead.

BOATING

A survey was made using the latest statistics from the U. S. Coast Guard and the Watercraft Safety Division of the Commonwealth of Pennsylvania.

It should be noted that the contributed percentage of pollution which pleasure boats are responsible for, is less than one-quarter of one percent of the total. Surveys by various groups along the Great Lakes bear out this estimate. However, because boating interests feel strongly that all causes, no matter how small, must be remedied; a committee has been established on a National basis to study the development of proper equipment for boats. The study should be complete and Federal law to support its recommendations enacted within the next twelve months.

Using statistics obtained from the National Association of Engine and Boat Manufacturers, the Outboard Boating Club of America, and a trend chart developed by the Erie Yacht Club for long-range building plans, coupled with the population projections of Erie City and Erie County, the following forecasts are presented.

BOATS USING ERIE COUNTY WATERS DURING YEAR 1965

STATUS	NUMBER	*LAND BASED SANITARY FACILITIES	SANITARY FACILITIES ABOARD
1. Pa. boats registered with State	2500	50 %	2.5%
2. Pa. boats registered with C. C.	500	20 %	20 %
3. Pa. boats unregistered	1000	.5%	0
4. From other Pa. counties	1000	0	0
5. From out of state	250	0	0
TOTAL	5250	26.6%	.31%

*Used Pennsylvania Sanitary Code which dictates the number of facilities required for public use per hundred persons or fractions of hundreds.

ERIELAND 2000

STATUS	NUMBER
1. Pennsylvania boats registered with the State	5000
2. Pennsylvania boats registered with the Coast Guard	250
3. Pennsylvania boats unregistered (sail)	2500
4. From other Pennsylvania counties	1750
5. From out of State	500
TOTAL	10,000

Ratio for the State of Pennsylvania Open Boats to Cabin Boats, 8 to 1

Ratio for Erie County, 3 to 1

PUBLIC, ORGANIZATIONAL AND PRIVATE CAMPS

PRIVATE CAMPS

Dohler's Cottages - Resort	LAKE ERIE	North East Township
Penn York Resort	LAKE ERIE	North East Township
Wolfrum's Cottages	LAKE ERIE	North East Township
Von Vreckin Cottages	LAKE ERIE	North East Township
Cowells' Beach	LAKE ERIE	Harborcreek Township
Coles' Beach	LAKE ERIE	Harborcreek Township
Baer Farm	LAKE ERIE	Millcreek Township
Eaglehurst	LAKE ERIE	Millcreek Township
Glenruadh	LAKE ERIE	Millcreek Township
Beachcomber	LAKE ERIE	Millcreek Township
Morewoods	LAKE ERIE	North East Township
Edelman's	LAKE ERIE	North East Township
Sommerlyst	No Water	Summit Township
Camp Mystic	French Creek	LeBoeuf Township
Kelso Beach	LAKE ERIE	Millcreek Township

ORGANIZATIONAL CAMPS

Camp Sherwin	LAKE ERIE	Girard Township
Camp Sequoyah	LAKE ERIE	Girard Township
Camp Notre Dame	LAKE ERIE	Fairview Township
Camp Kateri	LAKE ERIE	Fairview Township
Great Lakes Camp	LAKE ERIE	Fairview Township
Camp Lambec	LAKE ERIE	Springfield Township
Camp Judson	LAKE ERIE	Springfield Township
Camp Fitch	LAKE ERIE	Springfield Township
Camp Caledon	LAKE ERIE	Girard Township
Lake Erie Bible Conference	LAKE ERIE	Millcreek Township
Camp Glinodo	LAKE ERIE	Harborcreek Township
Christian & Missionary Alliance	No water	Washington Township
Camp White Swan	Walnut Creek	Fairview Township
Camp Kiwanis	Elk Creek	McKean Township
Girl Scout Camp	Gifford Farm	Millcreek Township
Boy Scout Camp	Jordan Road	Harborcreek Township
Boy Scout Camp	Walnut Creek	Millcreek Township
Sommerlyst	No water	Summit Township
Camp Hawthorne Ridge	Creek	Fairview Township
WLD Ranch	No water	Fairview Township

ORGANIZATIONAL CAMPS

There are 20 organizational camps providing various types of recreation and training at the present time in Erie County. This includes Boy Scout, Y. M. C. A. and church camps. The campers and camp personnel are from various counties in Pennsylvania and also from adjoining states.

A total of approximately 10,000 persons per year take advantage of the services given by these camps.

Water and sanitary facilities often vary from a hand water pump and privy to a public water supply and public sewers.

Sewage disposal systems in most cases cause a minimum of trouble to the operators of camps, located along the lake plain. The gravel and sand soil structures provide favorable subsurface liquid waste disposal media and these soils are the basic earth makeup in this area.

Problems with liquid waste disposal are encountered at camps located in areas not on the lake plain. Interior locations are most likely to be situated on basic clay soil structures, which do not readily and efficiently accept any liquids.

Adequate provisions for solid waste storage and disposal have been made in the majority of camps. Fly and rodent-tight metal containers are used for storage and garbage and refuse. Private haulers collect the accumulation two times weekly and dispose of it in dumps and landfills. Burning of waste is discouraged, but some operators still persist in burning paper and other easily-burned refuse. Occasionally a small or new installation will have to be informed of means and methods of storage and disposal, but in itself this item could not be considered a problem.

The major problem at most camps is the water supply. Ground water supplies along the Lake Erie shore are either nonexistent or insufficient in output. Quality is also poor because of high iron concentrations, salt water intrusions or odorous sulphur compounds.

The usual procedure in camps where drilled or dug wells are used, is to monitor the use of the available supply with the least possible inconvenience to everyone concerned.

Other methods used are:

1. Infiltration Gallery constructed in a small creek bed with the addition of various sized gravel for filtration plus pumping and chlorination.
2. Directly from Lake Erie combined with filtration and chlorination.
3. Directly from a creek combined with filtration and chlorination.

Camps located a mile or more directly away from the Lake Erie shore, are less liable to have water supply troubles, particularly if the site is picked on the basis of available water supply, rather than for its aesthetic values. However, in the past, this process has not always been used and consequently situations occur in these inland camps where water supplies at times are meager and insufficient, and a rationing program is used to conserve the available supply. In two instances, the drinking water is transported to the camp from the City of Erie Public Water System.

Chlorination, although not always necessary, is used by some organizations as a safety factor for a safe supply although they have drilled wells that are normally considered a safe potable supply.

It is recommended that the previously mentioned county ordinance governing public, private, or organization-recreational camps be instituted to require that any new camp will have a safe and adequate water supply, thereby insuring the health, welfare, and convenience of the users of these facilities.

Other problems arising from these institutions can be controlled with existing laws available to concerned agencies, providing these agencies, are notified of construction or institution of the new campsite previous to its use.

There are 15 private recreational cottage or cabin-type camps, most of them along the Lake Erie shore, that have similar problems peculiar to the organization-type camps. As previously mentioned, water supplies are their major problem.

Another problem which affects everyone in the poor quality of the Lake Erie water in the area generally used for swimming caused by decaying algae accumulations. At times the water is so smelly that recreational or other activity in the area is impossible. Accumulations at times become so thick and massive, it is impossible to walk through it to swim in cleaner water or to launch a boat from the immediate shore. This problem is the largest one for the private camp operator and will continue to be so in the foreseeable future. People just do not patronize vacation places that look and smell like garbage dumps.

It is debatable that any action instituted at county level could help to change this condition. Action to abate it is being taken at state and Federal levels, but any effective planning concerning Lake Erie camp recreation, should consider this situation as permanent at least until the year 2000.

TRAVEL VEHICLE PARKS

Waterford Municipal Park	Lake LeBoeuf	Waterford
Felton's Beach	LAKE ERIE	North East Township
Weindorf's	LAKE ERIE - Elk Creek	Girard Township
R-K Camp	No water*	McKean Township
Warren Camp	No water*	McKean Township
Cassidy Campgrounds	Walnut Creek	Millcreek Township
Baer Farm Trailer Court	LAKE ERIE	Millcreek Township
Camp Mystic	French Creek	LeBoeuf Township
Riverside Boat Livery	Conneauttee	Edinboro
Presque Isle Trailer Park	No water*	Millcreek Township
Lake Erie Trailer Park	No water*	Girard Township
Raccoon Creek Park	LAKE ERIE	Springfield Township
Lorence Trailer Park	No water*	Millcreek Township
Campers' Hill	No water*	Venango Township

*No bodies of water available for recreational purposes.

Travel vehicles as an adjunct to a vacation trip are a relatively new development that has appeared on the vacation scene within the last ten years. The use of these compact homes on wheels is growing rapidly and manufacturers anticipate doubling their output during the next ten years. Total output during 1950 was 18,000 units and production is estimated at almost 200,000 units during 1966.

Most travel vehicles manufactured are in four different types and are not all trailers although they may be designated as such, insofar as usage is concerned. These types are:

1. Travel trailer -- a vehiculer portable structure built on a chassis designed for temporary use for travel, vacation, or recreational purposes and permanently designated as a travel trailer by the manufacturer. It shall not exceed 4500 lbs., in weight, 8 ft., in width, or 29 ft. in length.
2. Convertible travel trailer -- a box trailer with a tent assembly covering it. Assembled and disassembled at each usage, with or without facilities.
3. Truck camper -- an assembly with or without facilities that may be mounted or dismounted at will, from a pick-up truck body.
4. Travel home -- a truck and body complete with facilities that may be used for this purpose only.

It is estimated that one-half million travel vehicles are using the facilities offered during the summer vacation months. Areas close to Interstate Highways, Thruways, Toll Roads, and Governmental operated recreation areas and parks receive the bulk of overnight visits.

In some parks in this state of Pennsylvania, spaces specifically for these vehicles have been provided. Adequate toilet and solid waste disposal facilities, safe water supplies and sewage disposal facilities, are offered to all campers in these parks. An example of this type of recreation is the "Buckaloons" located in Warren County on Route 6 at Irvine, Pennsylvania.

Located in various places in Erie County are 14 trailer parks that provide service for travel trailer campers. Facilities offered range from good to poor. No travel vehicle camp has complete or adequate facilities to offer the overnite or long-period camper.

All travel vehicle camps have potable and adequate water supplies. Convenience of availability of the water supply to the camper, is lacking in many instances.

These camps all have toilet facilities ranging from privies to flush toilets, some complete with hand basins, showers, and laundry facilities. Others do not have water under pressure available, and offer only a privy for each sex.

Solid waste storage and disposal facilities in most camps are adequate with containers for both items provided at each space, and a private or public collector picking it up at least once every week. There are cases, however, where a camp ground owner may dispose of it himself and sometimes by an insanitary method -- usually by burning. This method creates a potential health hazard by providing food for rodents and insects. A smoke and odor nuisance may also occur.

A small number of the camps are equipped with sewage systems constructed to accommodate waste water and sewage coming from the vehicles but the majority make no provision specifically for this waste material. Situations could arise where fecal waste and hand and dishwashing waste water would be indiscriminately drained to the surface of the ground, either directly underneath the trailer, or in some other location within or adjacent to the park property.

The development of travel vehicles with holding tanks for sewage wastes, has created a public health problem in that the indiscriminate dumping of sewage wastes along highways and in recreation areas is occurring. A major step has been taken to alleviate this problem with the development of low cost, recreational-vehicle sanitary stations. These stations have concrete holding tanks of adequate size with a seal cover opening, into which the drain hose from the vehicle holding tank can be fastened, while the tank is allowed to empty. A concrete apron surrounds the sewage inlet to permit periodic washdowns of the immediately adjacent area. All travel vehicle camps have such facilities.

Because this is not a lucrative business, few people or organizations provide adequate facilities and a healthful environment to protect the health of all concerned that use them.

GENERAL HEALTH

ERIELAND 2000

GENERAL HEALTH COMMITTEE

INTRODUCTION

Erie County as described in the introduction to this report is a rural-urban community with an estimated population of 266,800 people. (Table 1)

The City of Erie, located on the shores of Lake Erie, is the nucleus of the County, and contains over half of the present county populations.

PROBLEM

At the present time, two official health agencies serve the total population: The Erie City Health Department, serving the City of Erie (Population 142,300), and the Erie County Department of Health, serving the remainder of the County (Population 124,500). Some overlapping of services are noted and coordination of effort is not evident, especially in environmental health.

Both departments offer a limited range of services supplemented and complemented by state agencies. Each has an advisory board of health and share the same Medical Environmental Health and Health Education Directors, on a share-the-cost program.

AREA OF STUDY

Since this project concerns itself with environmental health planning, this report will cover specific information on staffing, financing, organization, services provided, and other matters pertaining to the environmental health section of both health departments within the confines of Erie County.

ENVIRONMENTAL HEALTH SERVICES - ERIE CITY

The Erie City Health Department's Environmental Health section offers a number of various services as shown in Table 2 of this report. A number of different environmental health areas not entered upon by the Health Department, are serviced by state agencies or other departments under the city government. They are: air pollution, accident prevention, industrial hygiene, radiological health, and review of sewage, school, pool and water construction plans and operation of these entities.

TABLE 1

POPULATION PROJECTIONS

	1960 Census	1975	1990
Erie City	138,440	148,000	146,500
Suburbs*	46,947	70,000	128,500
Urban Area	185,387	218,000	275,000
Erie County	250,682	294,200	383,000

Source: 1960 U. S. Census of Population
Erie City and Erie County Planning Commission

*Harborcreek, Lawrence Park, Millcreek, Wesleyville.

As indicated in the above table, major development will occur in the suburbs* over the next 30 years.

THOMAS C. WEST, DIRECTOR
DIVISION OF ENVIRONMENTAL HEALTH, COUNTY-CITY HEALTH DEPARTMENTS

ERIE CITY HALL
HOME OF CITY HEALTH DEPARTMENT

HOME OF THE ADMINISTRATIVE OFFICES
OF THE COUNTY HEALTH DEPARTMENT
Located in the Erie County Hospital Annex,
shown above.

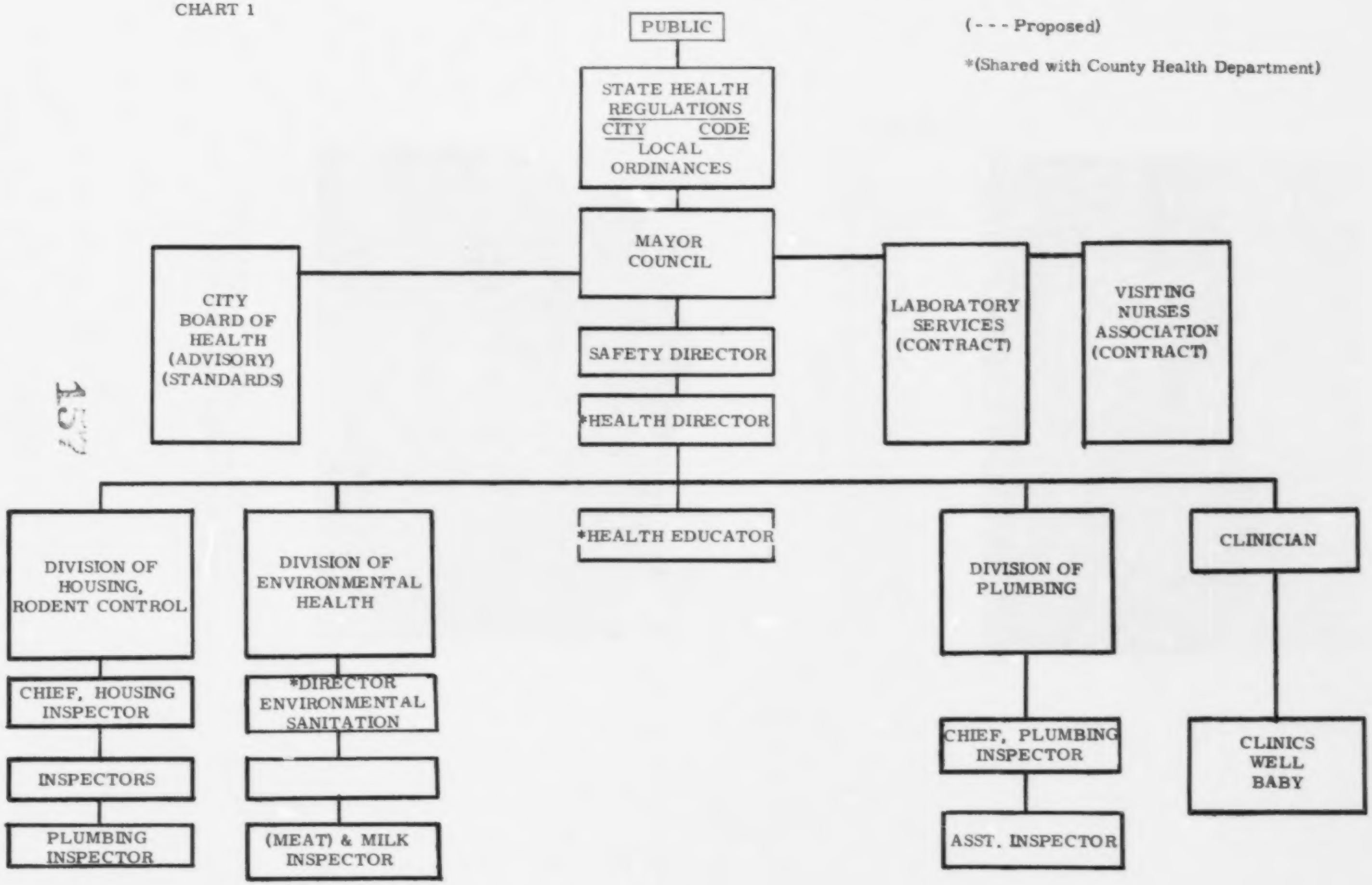
JOHN H. DAUER & SONS
WHOLESALE DISTRIBUTORS

COUNTY HEALTH DEPARTMENT CLINICS
AND ENVIRONMENTAL HEALTH

CHART 1

ORGANIZATION CHART

ERIE CITY DEPARTMENT OF HEALTH

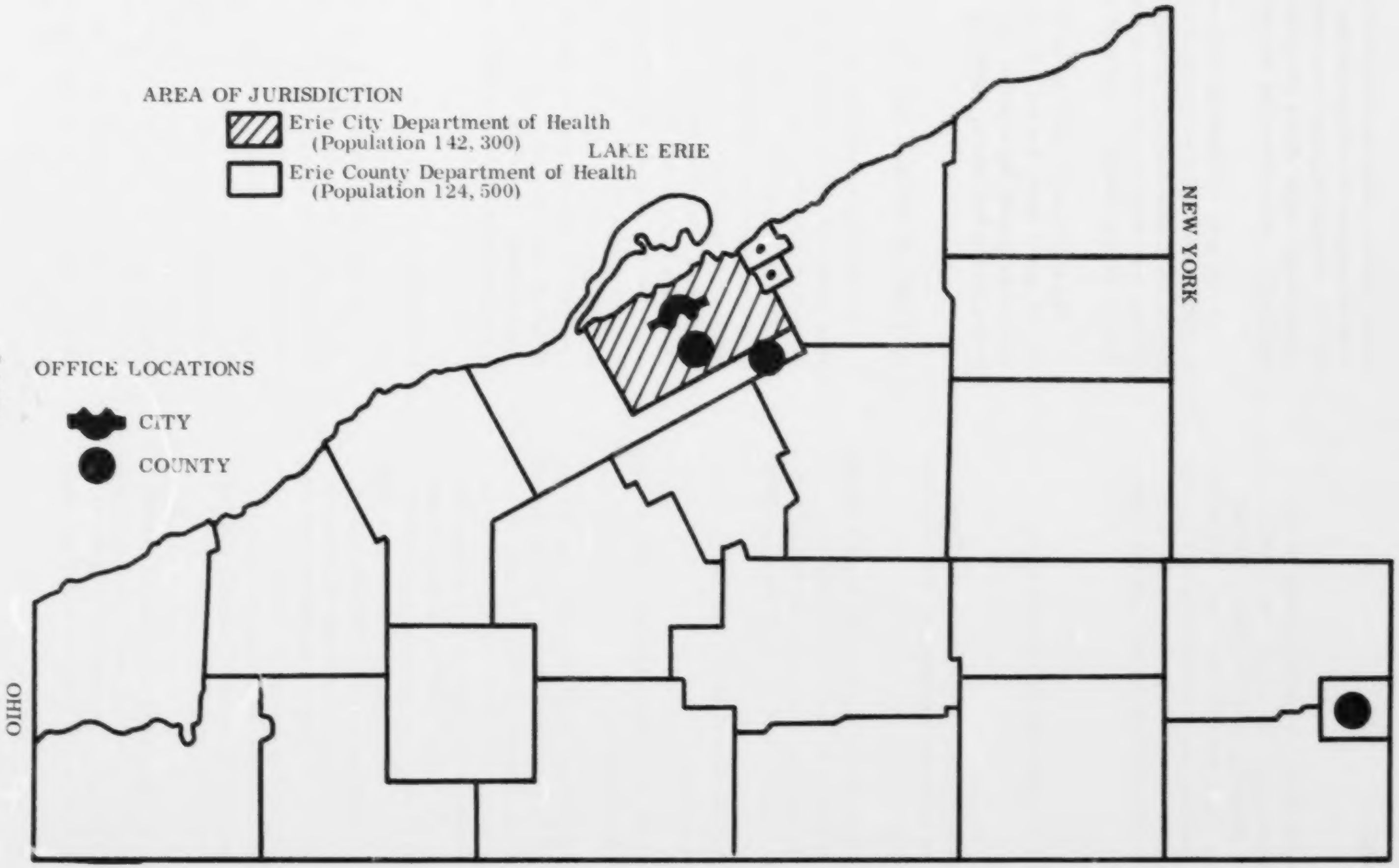

PUBLIC
STATE HEALTH REGULATIONS
CITY CODE
LOCAL ORDINANCES
MAYOR COUNCIL
CITY BOARD OF HEALTH (ADVISORY) (STANDARDS)
LABORATORY SERVICES (CONTRACT)
VISITING NURSES ASSOCIATION (CONTRACT)
SAFETY DIRECTOR
*HEALTH DIRECTOR
DIVISION OF HOUSING, RODENT CONTROL
CHIEF, HOUSING INSPECTOR
INSPECTORS
PLUMBING INSPECTOR
DIVISION OF ENVIRONMENTAL HEALTH
*DIRECTOR ENVIRONMENTAL SANITATION
(MEAT) & MILK INSPECTOR
*HEALTH EDUCATOR
DIVISION OF PLUMBING
CHIEF, PLUMBING INSPECTOR
ASST. INSPECTOR
CLINICIAN
CLINICS WELL BABY

(- - - Proposed)

*(Shared with County Health Department)

MAP 1

ERIE COUNTY, PENNSYLVANIA


AREA OF JURISDICTION
▨ Erie City Department of Health (Population 142, 300)
☐ Erie County Department of Health (Population 124, 500)
LAKE ERIE
OFFICE LOCATIONS
CITY
● COUNTY
NEW YORK
OHIO

PERSONNEL

Of the thirteen (13) environmental health personnel employed, six (6) are sanitarians, two (2) are plumbing, and five (5) are housing inspectors. Each specialty functions as a separate unit (Table 3) and in two divisions, they are under the guidance and direction of a division chief who receives his direction from the health officer.

DIVISION OF COMMUNICABLE DISEASES

The sanitarians have a division chief and they receive guidance and technical advice directly from him.

Under the table of organization for the Health Department (Table 3), two (2) positions are presently vacant, and funds have not been allocated for acquisition of these personnel. They are:

Market (Meat) and Milk Inspector
Bacteriologist

Both of the above positions have been vacant for a number of years.

Under the Third Class City Code, and as required by ordinance, the Erie City Health Department is supposed to have a milk and market inspector. In order to fill in the gap where the milk and market inspector was to function, the sanitarians now inspect markets in their respective assigned area. One sanitarian covers the milk program by collecting specimens from milk trucks and submitting them for bacteriological analysis. This inspector also has an assigned area to cover in the over-all sanitation program. According to their program, 90% of the time spent by the sanitarian is in food sanitation, nuisance complaints, including rodents and vectors, and swimming pool inspections.

For work assignments, the city is divided into four (4) sections. One sanitarian is assigned to each section and is responsible for general sanitation duties in that area, as described early in the report. Although the population in the section assigned to each sanitarian may vary by 15,000, certain districts are overwhelmingly commercial, while others are predominately residential, which evens out the work load.

In the past, sanitarians were required to do sanitation work outside the city limits involving inspection of soda bottling and milk plants. This has not been done in a number of years. (See Map 1, Area of Health Department Jurisdiction.)

Major programs included in the City Health Department's work, but not presently done in the County Health Department, are inspection of beauty and barber shops, plumbing, and housing.

DIVISION OF HOUSING AND RODENT CONTROL

The housing section has established seven (7) pilot areas, to which a man is assigned for inspection purposes. Some receive more than one area to investigate. In these areas, house-to-house inspections are made and at times, team inspection of areas are done. This involves the general sanitation with the housing man. For answering housing and rodent or vector nuisance calls, the city is again divided, but into four (4) sections comparable to the areas allocated to the general sanitarians. At times, the housing inspectors do general sanitation work. Poisoning of rats is done only on city-owned property when funds permit. The Chief of the Housing Section is also Director of the Rodent and Insect Section.

PLUMBING

The plumbing personnel are responsible under the city plumbing code, to inspect all new building construction, for unhealthful or illegal cross-connections, in order to prevent contamination of the city water supply. All licensed plumbers in the city must report all new construction or renewal plumbing to this office. Once each year all bars and clubs are inspected for plumbing irregularities, and the division receives a $5.00 fee for this service. Complaints involving inadequate plumbing, sewer gas, etc., are constantly checked by the two men in the division routinely. Complaint follow-up is primarily their major work load.

WORKING HOURS

The work week is, on the average, five days long, seven hours per day, thirty-five hours per week. The staff rotates so that one man covers the office on Saturday morning, when City Hall is open.

Each sanitarian, housing, and plumbing inspector reports for duty at 8:30 a. m., and leaves for field work by 9:00. He is required to report back to the office by 12:00 noon and is back in the field by 1:30 p. m. All personnel return to the office by 4:00 p. m. for report writing and reviewing the next day's work schedule. The office closes at 4:30 p. m. One week per month one sanitarian and housing inspector must report to their section, and remain there between 12:00 noon and 1:00 p. m., in order that the stenographic help can go to lunch. Little overtime is accrued for night duty and no compensatory time is allowed for after-hour work.

PERSONNEL QUALIFICATIONS

To be hired as a sanitarian by the City Health Department, a person must pass certain criteria as follows:

1. Must be a high school graduate.
2. Must take up residency in the city within ninety days after employment.
3. Must pass City Civil Service examination, and, after employment,
4. Must complete basic sanitation course offered by the State Health Department.

All employees chosen by the Medical Director and approved by the Board of Health, are presented to the City Council for final approval before employment.

Although the city environmental health personnel do not meet the minimal educational requirements for sanitarians required by the state, they do possess experience and technical competencies required. As of July 1, 1966, the City Health Department will abide by the "Local Health Administration Law", Act 315, in regards to personnel qualifications according to the regulations of the State Health Department.

SALARIES AND BENEFITS

As shown in Table 3, the various positions call for a differential in salary. At present, the highest in the over-all environmental health section, goes to the Director, of Chief Sanitary Inspector, who is on part-time loan from the County Health Department. His salary is $12, 000 per annum, $6, 000 from the city and $6, 000 from the county. The Chief Plumbing Inspector receives $6, 500 per annum maximum. All the rest, sanitarians, $5, 820, assistant housing $5, 300, and plumbing inspectors, $5, 820, receive per annum maximum. These salaries were recently revised and set by the City Administration in 1966. All salaries are on an incremental basis with no cost of living wage increase or years of service incentive bonus included. None of the salaries meet with accepted salary standards presently in force in the State Health Department, or with other areas in the Nation with comparable populations.

Social Security is mandatory for all new employees and old employees were given a chance to join during certain periods.

Sick time equals ten days per year accumulative to thirty. Upon employment, joining of the retirement plan is mandatory.

Each person receives a $1, 000 life insurance policy while employed, and is also covered by Workman's Compensation, in case of injury.

Hospitilization is carried free of charge on all employees, but if they want to insure their family, the entire cost of this additional coverage must be borne by the employee.

Each individual receives annual leave of two (2) weeks each year. After five (5) years of continuous employment, three (3) weeks annual leave is given. After eighteen (18) years, one (1) day per additional year is added to the annual leave until the maximum of four (4) weeks is reached.

LONG-TERM INTERDEPARTMENTAL PLANNING

According to the State Environmental Health Evaluation Report of the City Health Department in 1964, no planning of any type is undertaken by this unit. There is little, if any, contact with other units of city government, in regards to health-related activities of which the health department could coincide its operations, such as: city planning, building, smoke abatement, sewer and water. The only contacts now made to these units are of minor nature and involve reports that are obliged to be sent to the health department, on water quality, treatment, etc. One of the reasons for this lack of planning may be that vital statistics, often referred to as the bookkeeping of public health, and essential in planning activities of any department, are not kept by the department. At present, the only organization who accumulates statistics, is the State Health Department's Office of Vital Statistics, located in the City of Erie. These figures are not readily available to local departments, and are not broken down according to the department's specific needs.

BUDGET

As indicated in the City Health Department's budget (Tables 3 and 5) monies for positions created by city ordinance in the department, are no longer being allocated.

The general picture shows a reorganization of certain units within the department, with a net gain in budget allocation, of some $9, 070 between the two years 1963 and 1965. Budget cuts were noted in rodent and vector control funds, chemicals (housing), demoliton (housing), chemicals, and lab supplies (sanitation).

Transportation cuts were noted in several areas and this was due to the creation of a motor pool under the city administration.

All funds in the budget, until recently, came from local taxes. As of July 1966, 1/2 of the City Health Department's funds are now received from the State. One-half of the budget, or a total of $.75 per capita, whichever comes first. No funds have been allocated from Federal sources.

TRAVEL

Because of the creation of the motor pool under the city government, no personal cars are used by the Environmental Health personnel.

INSERVICE EDUCATION

Although not required by administration, nor organized on a regular schedule, the environmental health section has been responsible for a number of good inservice education programs, using other public service departments within the city organization. It has also called upon the state offices to supply teaching personnel in areas such as communication, sanitation, etc. These programs include all of the environmental health personnel, and other city departments are invited to attend. Needs or programs desired are usually decided among a few, but all have proven of benefit.

Each summer, two or three personnel from the environmental health section are permitted to attend the annual State Health Department Summer Conference in State College, Pennsylvania. This is primarily an inservice education event.

Periodically during the year, programs arise that are Federally supported and, if the director approves, environmental health personnel may attend. There is some money in the budget for short out-of-town courses or meetings. Attendance is at the discretion of the Medical Director. The sanitarians have indicated that they need more highly technical courses, but there is a lack of funds for training.

ENVIRONMENTAL HEALTH LAWS AND REGULATIONS

The City Health Department follows the broad health rules and regulations of the State of Pennsylvania for the protection of the general population. The Department must also adhere to regulations in the code, for third class cities. The State Health Department reserves the right to the Sanitary Water Board, to inspect all public and industrial waste facilities in the city.

TABLE 2
ENVIRONMENTAL HEALTH PROGRAMS

PROGRAM	ERIE CITY	ERIE COUNTY
Eating and Drinking Establishments	Yes	Yes
Camp and Park Sanitation	No	Yes
Air Pollution	No- State Health Dept.	No-State Health Dept.
Accident Prevention	No-State Health Dept.	No-State Health Dept.
Food Processing Plants	No-Dept. of Agriculture	No-Dept. of Agriculture
Frozen Dairy Products	Yes-Dept. of Agriculture	No-Dept. of Agriculture
General Sanitation Complaints	Yes	Yes
Grocery Stores	Yes	Yes
Hospitals	Yes-Food, Refuse	Yes-Food, Refuse
Motels	Yes	Yes
Housing	Yes	No
Ice Manufacturers	Yes	No
Industrial Hygiene	No-State Health Dept.	No-State Health Dept.
Meat Inspection	No-State Dept. of Agriculture	No-State Dept. of Agriculture
Milk Inspection	Yes-State Dept. of Agriculture	Yes-State Health, Co. Health, Ag. Dept.
Mobile Home Parks	No	Yes
Nursing Homes	Yes	Yes
On-Lot Sewage Disposal	Yes	Yes
On-Lot Water Supply	Yes	Yes
Plumbing Inspection	Yes	No
Poultry Inspection	Yes	Yes
Radiological Health	No-State Health Dept.	No-State Health Dept.
Refuse Collection, Disposal	Yes	Yes
Rodent Control	Yes	Yes
Schools	Yes	Yes (City and County)
Swimming Pool Sanitation	Yes	Yes
Vector Control	Yes	Yes
Epidemiology	Yes	Yes
Beauty and Barber Shops	Yes	No
Fairs	No	Yes
Mobile Units	Yes	Yes
Bakeries	Yes	Yes
Food Handling Courses	Yes	Yes
Reviewing of Plans of Proposed School Sites, Schools, Swimming Pool Plans	Yes (Planning only) St. Health Dept.	Yes-State Health Dept.
Semi-Public Water Supply	No	Yes
Radiological Health Monitoring	No	Yes (U.S.P.H.S.)
Air Pollution Monitoring	No	Yes (U.S.P.H.S.)

TABLE 3

PERSONNEL
ENVIRONMENTAL HEALTH SECTION

ERIE CITY HEALTH DEPARTMENT

POSITION	PERSONNEL	SALARY PER YEAR
Chief, Sanitary Police*	1	12,000
Sanitarians	5	5,128 - 5,820
Chief Housing Inspector	1	6,648
Assistant Chief Housing Inspector	1	4,500 - 5,828
Housing Inspector	3	4,500 - 5,300
Chief Plumbing Inspector	1	6,540
Plumbing Inspector (Housing)	1	4,500 - 5,820
Bacteriologist	0	
Market (meat) and Milk Inspector	0	
	13	

ERIE COUNTY DEPARTMENT OF HEALTH

Director of Environmental Health*	1	12,000 maximum
Sanitarian III	0	7,500 maximum
Sanitarian II	1	6,390 maximum
Sanitarian I	4**	5,280 - 5,529 maximum
	6	

*Dual Position, City-County

**One Sanitarian is Part-Time

One deterrent to move planning, is the lack of vital statistical information on which to base future activities. The health department does not have an office of vital statistics. Information available from other sources is inadequate.

DISCUSSION

In viewing the budget, there has been an increase noted in the area of salaries due to pay increases for personnel. With the increased dissemination of information and activity within the division, more office supplies and postage were required in 1965.

A new line was added to the budget in 1965 on request of the County Commissioners, namely water pollution.

TABLE 4

BUDGET

DIVISION OF ENVIRONMENTAL HEALTH
ERIE COUNTY DEPARTMENT OF HEALTH

	1963	1965
SALARIES	$32,420.00	$35,390.00
OFFICE SUPPLIES & BIOLOGICS	1,565.00	2,206.00
CAPITAL OUTLAY	1,018.00	605.00
TRAVEL EXPENSES, MILEAGE	5,400.00	5,000.00
TELEPHONE	325.00	325.00
EQUIPMENT MAINTENANCE	45.00	65.00
LIGHT, HEAT, WATER	85.00	85.00
RENT	540.00	540.00
LAB FEES: COMPOUNDS, MILK, WATER	2,600.00	2,400.00
WATER POLLUTION: EQUIPMENT, MILEAGE AIRPLANE RENTAL, LAB FEES		1,845.00
REPAIRS TO OFFICE	500.00	
TOTAL	$44,498.00	$48,461.00
COUNTY'S SHARE	22,249.00	24,235.00
STATE'S SHARE	22,249.00	24,235.00
UNEXPENDED (STATE)		1,525.69
UNEXPENDED (COUNTY)		1,525.68

Under Act 315, "Local Health Administration Law", P. L. 1304, the County may be reimbursed either one-half of its annual budget, or a total of $.75 per capita. This money is sent to the County Commissioners on a quarterly basis, after the budget has been submitted and approved by the State Secretary of Health. All State monies not spent at the end of the year, automically are returned to the State's general fund. In 1965, a total of $3,051.37 was unexpended. One-half of this was turned back to the state. The other half of the money comes from local taxes, of which the city taxpayer also contributes, and, in a sense, supports the County Health Department.

TABLE 5

DIVISION OF ENVIRONMENTAL HEALTH
CITY HEALTH DEPARTMENT
BUDGET

		1963	1965
DIVISION OF COMMUNICABLE DISEASES			
Salaries (5 sanitarians)		27,910.00	26,500.00
Transportation		720.00	300.00
Membership and Books			45.00
Training and Schools			250.00
Chemicals and Lab Supplies		1,500.00	
Contract and Order Service			
	TOTAL	30,130.00	27,095.00
DIVISION OF PLUMBING			
Salaries		11,030.00	11,800.00
Service and Fees		400.00	400.00
Office Supplies		150.00	400.00
Examination Boards			
Communication		200.00	
	TOTAL	11,780.00	12,600.00
DIVISION OF HOUSING			
Salaries		13,620.00	29,410.00
Materials			25.00
Office Supplies		100.00	500.00
Chemicals - Lab		150.00	25.00
Transportation			300.00
Demolition		1,000.00	500.00
Communications		200.00	
Equipment Service			25.00
Replacement			450.00
	TOTAL	15,070.00	31,235.00
DIVISION OF FOOD INSPECTION			
Salaries		4,700.00	
Transportation		180.00	
	TOTAL	4,880.00	
ENVIRONMENTAL HEALTH TOTAL		61,860.00	70,930.00
BUDGET EXCESS AT END OF YEAR		0	0

MONIES RECEIVED FOR SERVICES - 1965	
Plumbing Licenses	574.00
Plumbers Examinations	65.00
Plumbing Codes	1.50
Sanitation Certificates	1,270.00
Plumbing Inspectors Fees	4,373.00
Restaurant Licenses	289.00
Birth Certificates	45.90
	6,618.40

Environmental health standards in all local school construction, must meet with State Health Department standards for water supply and sewage and cafeteria facilities prior to approval.

The City itself has apssed a number of ordinances on its own, in order to maintain a healthful environment for its citizens and to abate nuisances.

Adoption and revision of the A. P. H. A. Housing Code to meet local conditions, has been effected within the last two years, to update and improve their housing program. A plumbing and rodent and vector code direct activities in these areas. Ordinances in regards to health rules and regulations affecting the citizens of Erie, do not apply to citizens of Erie County.

PHYSICAL FACILITIES (Chart 2)

The Environmental Health section of the City Health Department is housed in the new City Hall located in downtown Erie. Adequate room, ventilation, desks and lighting is evident. The location of the main office gives each field worker about equal distance to travel to his working area. Rooms are available for conferences and movies, if needed.

ENVIRONMENTAL HEALTH LABORATORY SERVICE

There are no laboratory facilities attached to the department. Specimens secured by the Health Department are analyzed by a privately contracted laboratory service. Specimens examined include milk, meat, water for bacterial contamination, and chemical analysis of certain fluids.

Total funds expended for laboratory services in 1965 were $825.00.

AIR POLLUTION CONTROL

At the present time, the City Health Department does not have an air pollution unit, but there is a smoke abatement office, under the Division of License and Inspection. A major portion of this office's responsibility is to license. Because air pollution has been linked to acute and chronic illnesses in humans, control has been in the past, delegated to public health departments.

According to recent local air pollution studies, the problem in Erie County has not yet reached critical proportions. However, steps should be taken to prevent further contamination of the air resources.

OCCUPATIONAL HEALTH PROGRAM

Industrial Hygiene and Radiological Health

Programs and activities concerned with the health and well-being of workers exist under a number of labels. Some are called industrial hygiene programs, environmental medicine programs, hygiene safety programs, etc. However, as stated, this program deals with the well-being of workers in industry. Erie City area has some 290 industries and with the 161 in Erie County, the total industrial complex comes to about 451. In this complex, more than 45,000 persons are employed, comprising 16% of the population.

An active occupational health program does not exist at the present time in the local health departments, but industrial hygiene services are available from the State Health Department in Meadville.

An industrial hygiene program is a need in Erie County. Ninety percent of the State Health Department's Industrial Hygienist's time is spent in the Erie area because of its many industrial health problems. Local industry actually saves money through the use of the health department industrial hygienist, rather than hiring a private health consultant to check out health problems. By recommending plant changes, the Industrial Hygienist saves industry money, the reduction of accidents, insurance costs, etc.

FUTURE NEEDS

According to population projections (Table 3) the City of Erie will only acquire about 8,000 more residents within the next thirty years. This slow growth may be occasioned by a number of problems, including the exodus of people in the city, to the suburbs, and the final acquisition of all remaining land within the city limits.

With the exodus of families with higher incomes, to the suburbs, an increase in low-income groups may be expected in various parts of the city. This would bring about a concomitant increase in housing and other environmental health problems. If the trend holds, we may also expect an increase in the cost of service, and an increase in the tax base because of its being passed along to the low income groups remaining in the city.

Future needs may well include additional personnel for housing and general sanitation programs to adequately cover the need. Coordination between the health department and other city departments, including top level program planning, should begin now in order to prepare for these expected changes.

ENVIRONMENTAL HEALTH SERVICES - ERIE COUNTY

The Erie County Department of Health's Division of Environmental Health offers many services similar to the City Health Department as shown on Table 2. Some of the environmental health areas not included in the County organizations activities are: accident prevention, industrial hygiene, air pollution, and radiological health, which are supplemented by other state agencies.

The County does work in several areas not covered by the City Department. These are: inspection of fairs, camps and parks, mobile home parks, and inspection of semi-public water supplies. The County is also involved in radiological and air pollution monitoring. The Health Department will begin a housing inspection program soon, but it has none at this time.

PERSONNEL

There are six (6) employees in the County Health Department's Division of Environmental Health (see Table 3). The Director of the Division is a sanitarian, who is responsible for administering the over-all environmental health programs of the department. One sanitarian acts as a supervising sanitarian. At this time, one sanitarian position is a part-time one. Funds have been allocated in the budget for the hiring of two additional people in this division during the present year.

Although one position remains vacant in the organizational setup of the environmental health unit, the part-time employee would be replaced with a full-time individual if two additional individuals were taken on.

WORK DISTRICTS

The County has been divided into four (4) sections, with some overlapping of work areas due to the one part-time employee. The director, on many occasions, has to do field work when there is a backlog of duties. This takes him from many of the executive duties for which he is responsible. In each area, the sanitarian is responsible for a general sanitation program (see Table 2).

Each year the sanitarians inspect all of the city schools and make recommendations to the Erie School Board when citations are found.

WORKING HOURS

The work week is five days long, seven hours per day, thirty-five hours per week. The sanitarian usually reports for duty at 8:30 a. m. each day, and quits at 4:30 p. m. Because of the distances they have to travel to get to their area, no requirement is made for them to report back at noon or before closing, although each man must submit an itinerary of his weekly schedule so that the director may locate him by phone in an emergency. Special assignments are distributed by the supervisor, and problems or technical advice is given when such problems arise in the field. Little or no night duty is required of the sanitarians, except when food handler courses are held. At times the men are required to attend borough or township meetings. Most of the after-hours duty is performed by the Director, because it usually involves the giving of technical advice in connection with engineering projects, or the explanation of rules and regulations being considered for adoption by local political bodies.

PERSONNEL QUALIFICATIONS

To qualify as a sanitarian in the Erie County Department of Health, certain criteria must be met. We may say at this point, that this criteria was not enforced when forming the department, but current requirement policies are in accordance with state regulations governing selection. The criteria as indicated by Section 9-10, Act 315; "Local Health Administration Law", under which the department functions, states that: (Section 9)

> "All personnel obtained by the health department must be employed according to regulations of the State Department of Health."

To qualify as a Sanitarian I, the entrance level in the Division of Environmental Health, an individual must have a bachelor's degree in one of the sciences, preferably the biological sciences. He must then be approved by the Board of Health and the Medical Director. Final employment rests with the County Commissioners. Presently, two members of the staff of six (6) qualify according to the State Health Department regulations in regard to educational requirements, although all meet technical and experience qualifications. All candidates for employment must complete the basic sanitation course offered by the State Health Department, unless he has prior experience and he must have an automotive vehicle for travel on county business.

SALARIES - BENEFITS

Table 3 shows the salary differential according to rating. The Director of the division receives the top salary of $12,000 per annum (maximum); Sanitarian III (vacant) $7,500 (maximum)' Sanitarian II $6,390 (maximum); two Sanitarians I, $5,529 (maximum); and Sanitarian I $5,280. The lowest paid sanitarian receives $100 per month because he is a part-time employee. Although effort has been made to bring all the salaries in line with the state recommendations, not all have reach the minimal level. No salary is on an increment basis, and cost of living increases or years of service bonuses are not included.

All employees are required to join the retirement system and automatically get a life-insurance policy in the amount of $3,000, after one (1) year's service.

Medical insurance is free for the individual, but if he insures his family he must pay half of the monthly policy cost.

All employees are covered under Workmen's Compensation laws.

Special fleet liability insurance is available free to all employees who use their cars on county business. This insurance may pay for claims above and beyond what the employee's private insurance may pay in any one accident.

A salaried employee during the first three calendar years earns five (5) days annual leave of absence with full pay; ten (10) days after the third year, and fifteen (15) days after 5 years. Leave of absence may be given in the calendar year after the first year of employment.

PROGRAM PLANNING

Acceptable type program planning is not currently practiced in the division, although future programs are briefly described in the division's annual report each year. Some reason for this may be because the health officer is in part-time status only, and because of the distance between the environmental health office and the administration office. The only occasion for meetings is when there are problems requiring concerted effort in administration.

Assistance of county planning and recreation has been procured in order to aid boroughs and townships in their future environmental health planning. Due to the lack of sufficient personnel much of the long-term planning is put off because of day to day work.

TRAVEL

The County of Erie does not supply its sanitarians with motor vehicles for travel, so a requirement for employment is that each individual must have a car. Mileage is paid for at the rate of $.1 per mile while the individual is on county business. This payment is not made for travel between work and home. Travel outside county limits, if on official business, is also reimbursed for at the same rate.

INSERVICE EDUCATION

Each week the director of the division reserves a part of one morning for the introduction of new materials, technical data, new state regulations, or any material pertaining to the duties of the sanitarians.

Areas of study or discussion are decided upon by the director, or asked for by the personnel. At times, outside technical people are brought in to assist in these programs, but such instances are rare. No over-all inservice program involving the entire department was promoted within the past year.

Each summer, several sanitarians attend the State Health Department's inservice education conference at State College, Pennsylvania. On occasion, when important training programs are offered in the state or Nation, the division director may send personnel after getting the permission of the Health Officer.

Periodically, when the environmental health unit sets up a community education program, such as food handlers courses, or a swimming pool operators course, some sanitarians are required to teach sections of the program or be in attendance. This is felt to be a part of the inservice education program.

ENVIRONMENTAL HEALTH LAWS AND REGULATIONS

The County Department of Health, under Section 10 of Act 315, "Local Health Administration Law",

A. Shall execute the power and duties vested in it or in local health authorities generally by the laws of the commonwealth, and the rules and regulations of the State Department of Health and other departments, boards, or commissions of the state government.

F. Shall make and enforce such rules and regulations, subject to the approval of the County Commissioners and institute such programs not inconsistent with law as may be necessary for the promotion and preservation of public health.

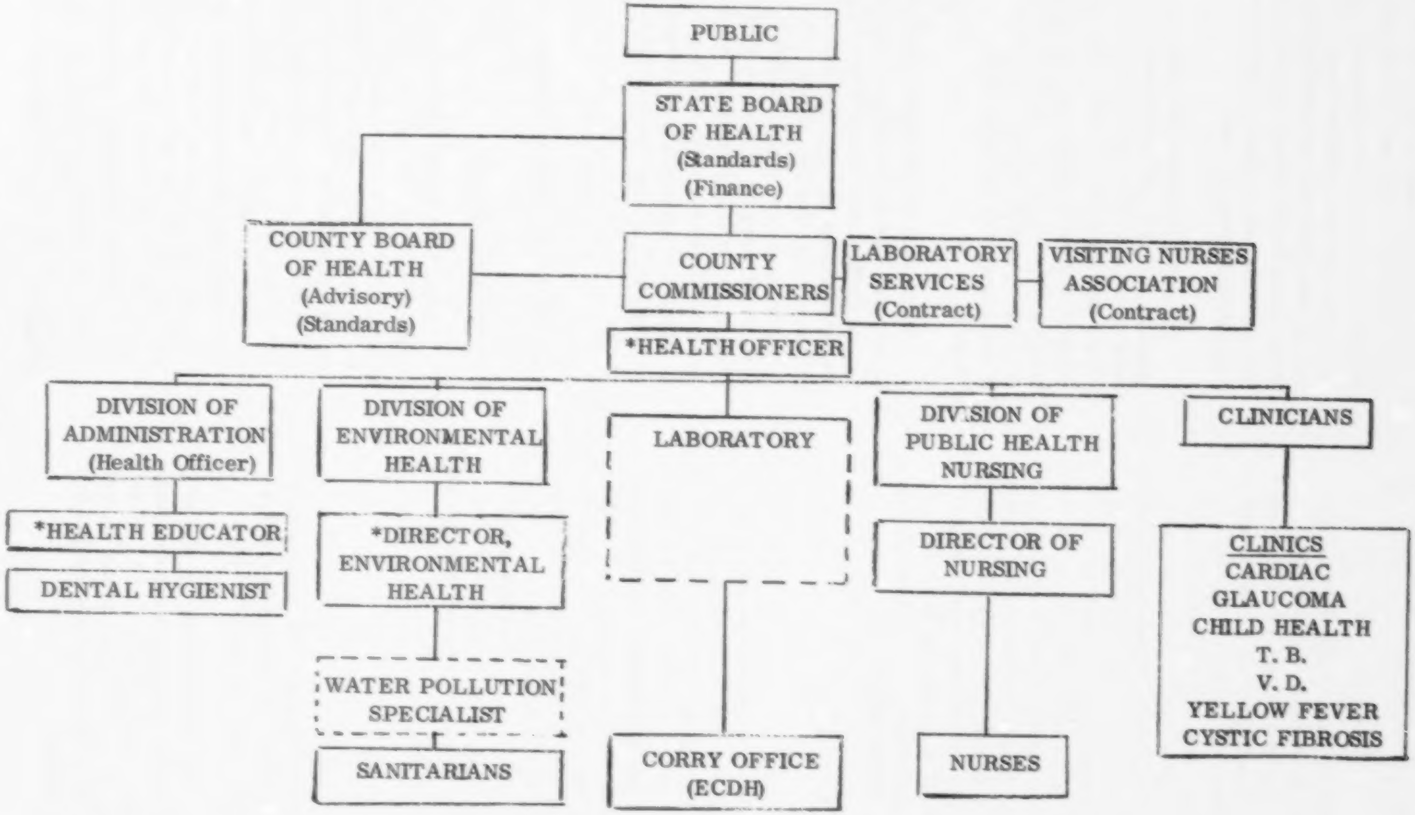
The Division of Environmental Health has assisted local boroughs, townships, and the county government in developing ordinances in various environmental health areas, for safer and healthier communities. These range from septic tank regulations to mobile home park ordinances, and follow nationally-accepted standards for such control. Some ordinances in effect in the county do not apply to the City of Erie.

PHYSICAL FACILITIES

The environmental health office as shown on May 1, is located in the City of Erie. Another office staffed part-time with one sanitarian, is located in Corry for service to the lower section of the county. The office in Erie consists of two inadequate rooms and a storage area. This space is presently overcrowded and houses four individuals including one secretary in one of the rooms and two persons plus office equipment, in the other. Acquisition of additional desks and equipment will be necessary. These have been delayed because of the lack of space. Physical separation from other units of the department gives rise to many problems involving administration, program planning, morale, increased travel costs, and lack of interdepartmental communication. If the two additional individuals were hired to fill out the division's staff, there is currently literally no place to put them in the office. The office itself is in disrepair and has poor ventilation and inadequate lighting.

ORGANIZATION CHART

ERIE COUNTY DEPARTMENT OF HEALTH


PUBLIC
STATE BOARD OF HEALTH (Standards) (Finance)
COUNTY BOARD OF HEALTH (Advisory) (Standards)
COUNTY COMMISSIONERS
LABORATORY SERVICES (Contract)
VISITING NURSES ASSOCIATION (Contract)
*HEALTH OFFICER
DIVISION OF ADMINISTRATION (Health Officer)
*HEALTH EDUCATOR
DENTAL HYGIENIST
DIVISION OF ENVIRONMENTAL HEALTH
*DIRECTOR, ENVIRONMENTAL HEALTH
WATER POLLUTION SPECIALIST
SANITARIANS
LABORATORY
CORRY OFFICE (ECDH)
DIVISION OF PUBLIC HEALTH NURSING
DIRECTOR OF NURSING
NURSES
CLINICIANS
CLINICS
CARDIAC
GLAUCOMA
CHILD HEALTH
T. B.
V. D.
YELLOW FEVER
CYSTIC FIBROSIS

(------PROPOSED)
(*SHARED WITH CITY HEALTH DEPARTMENT)

ENVIRONMENTAL HEALTH LABORATORY SERVICE

Since its inception, the Health Department has never engaged in any type of laboratory activity. All the needed laboratory analyses of the environmental health section, is contracted out to a local hospital laboratory. Samples usually sent to these labs are for bacterial analysis and include water, food, milk, and at times certain other fluids for chemical analysis. Problems have arisen when animal heads must be shipped to Harrisburg for examination for rabies. At times these heads are frozen too solid, or else they putrefy because of the length of the distance they must be shipped, and hence cannot be examined. The County Commissioners have occasioned action in Harrisburg, which is expected to permit the acquisition of funds for the development of a laboratory. It would be placed under the County Health Department.

FUTURE NEEDS

Based on population projections shown in Table 1, the suburban area now serviced by the County Health Department, will more than double its population by 1985. This will place an additional strain upon the department unless it too is enlarged. Increased needs will develop in the areas of housing, air pollution control, water, food and milk sanitation, sewage and solid waste disposal, not only for residential sections, but also for the industrial areas. Such areas will demand these services prior to expansion, and in the case of new industry, even prior to initial settlement in the area.

SUMMARY

From the report one must ask the question: How can the two health departments best serve the people in the growing metropolitan area?

Today, about the United States, we find 70% and more of the people living in and around large metropolitan areas, such as Erie County. The suburbs are growing twice as fast as the central cities, and this inbalance causes certain political and economic problems.

Population shifts within metropolitan areas have begun to modify the types of community facilities needed in both cities and suburbs. In our area, the most obvious need is for sewage, water, and maternal and child health services. Many young families have moved to the suburbs and child population there is increasing at a substantially greater rate.

As young families leave the city, the large number of people left behind are older individuals with special needs, such as nursing homes, and long-term home care places. The children of dependent and low-income groups are now beginning to be the largest portion of the city's population in many areas. This fact will become more apparent in our area also, over the next decade.

In the past decade many metropolitan areas have found that the merging of city and county health departments can provide the essential health services with greater efficiency, economy, and better use of staff. More than 180 of these consolidations are now in existence, including the recent merging of the Los Angeles City and County Health Departments. This combination resulted in the merging together of 26 or more health office buildings, and better than 1,200 employees, serving a population of 7 million people.

BENEFITS OF CONSOLIDATION

Increased Efficiency

It has been shown that the operation of a single health department (as opposed to several small departments) permits greater efficiency. It also permits the necessary flexibility to meet major emergencies. It eliminates duplication of inspections which is now being practiced, and a higher and more consistent level of service is given throughout the domain of the department. Physicians benefit from having a central reporting point and by having adequate health department facilities which can better serve their needs. Consolidation can also solve the health problems which often overlap city-county jurisdictions and frequently get fouled up because of the red tape of fixing responsibility for action. Water pollution programs offer a good example of this.

BETTER USE OF STAFF

Consoldiation of city and county health departments can mean more effective use of trained personnel, a resource frequently in short supply. Better salaries, comprehensive personnel policies, and greater opportunities for advancement are advantages of a large department which also attracts quality personnel.

FINANCIAL CONSIDERATION

Consolidation, in many instances, of city-county operations, has been economical. If not an actual saving of money, the economy has resulted in terms of more service for equal money which is what the taxpayer wants.

Many residents of areas where both city and county health departments are maintained, feel they should not be taxed for the operation of both departments.

Consolidation equalizes the burden of financing the health department, and also makes available broader financial sources. Both city and county residents have much to gain by a merger. Erie County residents can benefit highly from the milk, meat and housing inspection programs of the City Health Department. Likewise, the city residents can benefit from the full-time services of the County Health Educator, dential hygienist, environmental health administrator, and established chronic disease screening programs, such as diabetes and glaucoma.

In addition, with combined effort, county-wide programs can be initiated in industrial hygiene; accident prevention, now of major importance to our community; chronic disease screening clinics where people can come to check on a multitude of diseases they may be afflicted with, from cancer to cystic fibrosis; comprehensive, coordinated home care programs where individuals may leave the hospital in the early convalescent stage and be followed at home by a nurse, doctor, social worker, and physiotherapist team.

With a combined effort and an adequate staff, certain administrative procedures now relegated to the State Health Department could be delegated to such a department. These are only a few avenues of future expansion and can only come to pass with a coordinated effort.

It must be clearly stated that services that affect the health and welfare of the citizen must come above political and personal differences not just because it is economically so, but because it is moral and humanitarian.

On the following table, we have shown some of the financial benefits of a merger.

BUDGETS

ERIE COUNTY DEPARTMENT OF HEALTH
AND
ERIE CITY HEALTH DEPARTMENT

****

ERIE COUNTY DEPARTMENT OF HEALTH
POPULATION 116,657

	Total Excluding Grants	County's Share	State's Share	State and Federal Grants
1961	$145,713.15	$ 72,856.57	$72,856.58	
1962	153,779.90	76,889.95	76,899.95	
1963	154,448.40	77,224.05	77,224.05	
1964	168,208.35	84,039.17	84,039.18	500.00
1965	170,169.80	85,084.90	85,084.90	1,239.00
1966	182,480.96	91,240.48	91,240.48	36,479.00

Reimbursable funds from State equal $.75 per capita or 50% of the budget, whichever comes first. This applies to both city and county health departments.

ERIE CITY HEALTH DEPARTMENT
POPULATION 135,399

	Total Excluding Grants	City's Share	State's Share	State and Federal Grants
1963	$ 89,920.70	$ 89,920.70		
1964	84,127.25	84,127.25		
1965	125,205.00	125,205.00		
1966	124,885.00	93,663.75	$31,221.50*	

STATE GRANT WITH COMBINED UNITS FOR 1965
BASED ON TOTAL POPULATION OF ERIE COUNTY
252,056

County Health Department Budget 1965	$ 85,084.90
City Health Department Budget 1965	125,205.00
Total	$210,289.90
Reimbursable from State	105,144.95
Total possible reimbursement based on $.75 per capita or 1/2 of budget, whichever comes first.	$200,100.00

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*Now eligible for state reimbursement as of June 1, 1966. State's share will be 1/2 of budget as of January 1, 1967.

I. RECORDING AND ANALYSIS OF HEALTH DATA

A. Recording and analysis of reports of births, deaths, marriages, divorces, and notifiable diseases.

B. Maintenance of registers of individuals known to have certain specific long-term diseases and impairments.

C. Conduct of special surveys to determine the prevalance and resultant disability from various diseases.

D. Collection and interpretation of morbidity data from such sources, as clinics, hospitals, organized nursing services, prepayment plans, industry, and workmen's compensation and disability insurance programs.

E. Maintenance of continuing records on the number and qualifications of all types of health personnel, the quantitative and qualitative resources of available facilities, and the types and extent of health services provided through various voluntary and public programs.

F. Periodic evaluation of community health needs and services.

II. HEALTH EDUCATION AND INFORMATION

A. Stimulation of the public to recognize health problems that exist, to study the resources available for meeting the problems, and to develop and put into action, programs designed to solve them.

B. Cooperation with and assistance of, official and voluntary organizations, such as departments of education and civic, youth, and other community groups in the development of their health programs.

C. Provision of individual instruction by public health nurses and other personnel, as in the case of families in which communicable disease has occurred, of mothers attending well-baby conferences, or of diabetic and other patients who are taught to follow the regimen prescribed by the family physician.

D. Organization of lectures, classes, and courses, such as mothers' and fathers' classes, courses for food handlers, classes for diabetics, and lectures to community groups.

E. Use of more educational and informational media, such as newspapers, magazines, pamphlets, movies, radio, and television.

F. Development of a well-rounded program of professional education, designed to assist the local health professions to maintain and improve the quality of service.

III. SUPERVISION AND REGULATION

A. Protection of food, water, and milk supplies.

B. Control of nuisances, sanitary disposal of wastes, and control of water and air pollution.

C. Prevention of occupational diseases and accidents.

D. Control of human and animal sources of infection.

E. Regulation of housing.

F. Inspection of hospitals, nursing homes, and other health facilities by means of:

1. Public education and individual instruction.

2. Issuance of regulations.

3. Laboratory control.

4. Inspection and licensure.

5. Revocation of permits and, as a last resort, court action.

IV. PROVISION OF ENVIRONMENTAL HEALTH SERVICES (AS NECESSARY)

A. Construction of pit privies.

B. Drainage, and larvicidal treatment of mosquito-breeding areas, residual spraying of homes for insect control.

C. Rat proofing of buildings, and other insect and rodent control measures.

V. ADMINISTRATION OF PERSONAL HEALTH SERVICES

A. Immunization against infectious diseases and other preventive measures such as the application of fluoride to children's teeth.

B. Advisory health maintenance service, as in child health conference, prenatal clinics, parents' classes, and public health nursing visits.

C. Case finding surveys of the general population, such as chest x-ray surveys, serological tests for syphilis, cancer detection programs, and school health examination. Adult health inventories and "multi-phasic" surveys for the detection of various groups of diseases may also be included.

D. Provision of diagnostic aids to the physicians, such as laboratory services and crippled children's, cancer, cardiac, and other diagnostic and consultation clinics.

E. Provision of diagnostic and treatment services for specific diseases, such as syphilis, tuberculosis, dental defects in children and expectant mothers, and orthopedic, cardiac, and other crippling impairments in children.

VI. OPERATION OF HEALTH FACILITIES

A. Operation of health centers and clinics.

B. Operation of general or special hospitals (as necessary).

VII. COORDINATION OF ACTIVITIES AND RESOURCES

A. Provision of effective leadership in meeting community health needs.

B. Encouragement of coordination of various official and voluntary agencies to avoid duplication and overlapping, and to assure efficient and economical administration.

C. Participation on interdepartmental or regional boards dealing with public water supplies, sewage and refuse disposal, control of atmospheric pollution, housing, city planning, hospital planning, zoning regulations, development of recreational areas and other public programs which have significant implications for community health.

PLANNING

CHARLES REEVE
City Planner

CHRISTOPHER CAPOTIS
County Planner

LEFT TO RIGHT SEATED: Lee M. Smith
Allen H. Kuhn, Chairman
Robert T. Dolan, Vice Chairman

LEFT TO RIGHT STANDING: William D. Heidt
Daniel W. Miller
George V. Thomas
Gus Pulakos
John W. McCarty

ABSENT FROM PICTURE: Douglas M. Moorhead extensions to its Master Plan Program. One of the continuing problems of both the City and County has been, is, and will be, the recruitment and retention of qualified professional planning personnel.

PROJECTIONS

Population projections and land use forecasts for the city, the surrounding suburbs, and the county have been prepared by the Erie City and Erie County Planning Commissions. The table below shows the projections of population for 1975 and 1990. The forecast for the City of Erie is based on the holding capacity of vacant ground remaining within the city, and the ultimate loss of population because of highway construction, urban renewal, and private redevelopment. As one would expect, the bulk of the population growth will occur in two of the four suburban communities surroudning the City of Erie.

ERIELAND 2000
POPULATION PROJECTIONS

	1960 Census	1975	1990
Erie City	138,440	148,000	146,500
Suburbs*	46,947	70,000	128,500
Urban Area	185,387	218,000	275,000
Erie County	250,682	294,200	383,000

Source: 1960 Census of Population
Erie City and Erie County Planning Commissions

*Harborcreek, Lawrence Park, Millcreek, Wesleyville.

Major development will occur in the surrounding municipalities, especially in Harborcreek and Millcreek Townships, with urban growth beginning to spread into Summit Township. It is expected that by 1975 all of the available vacant land within the City of Erie, Lawrence Park, and Wesleyville will have been developed, over 2,000 acres in Millcreek Township will have been added to the urbanized area, and an additional 500 acres in Harborcreek will have been used. From 1975 to 1990, 3,000 more acres of developed land will be added in Millcreek and 2,500 acres in Harborcreek. Most of this development will be for single-family homes at relatively low-densities of two to four families per acre or less.

EVALUATION OF PLANNING OPERATIONS WITHIN THE COUNTY AND THE COUNTY'S MUNICIPALITIES

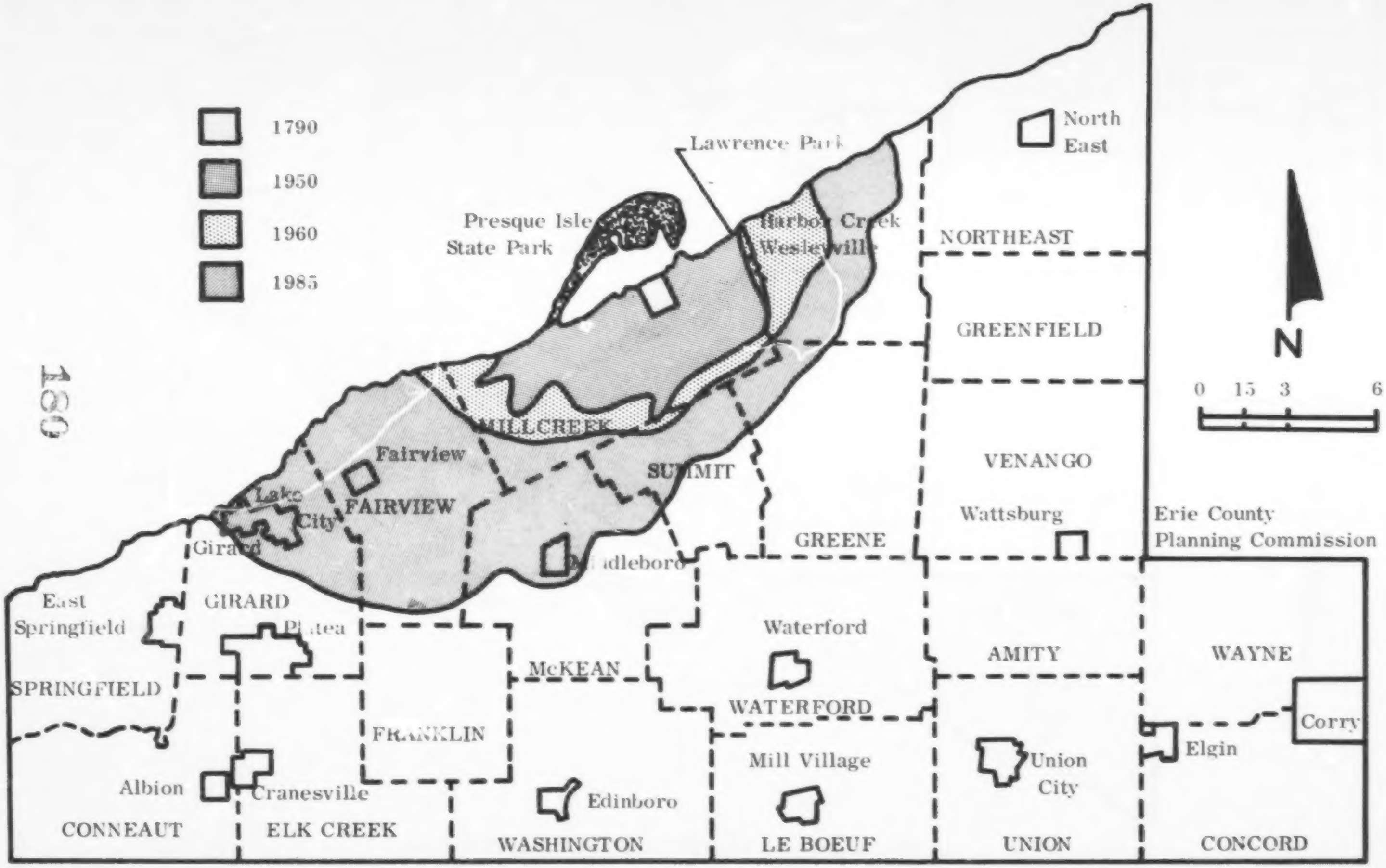
Status and Effectiveness of Local Planning Commissions and Master Plans

At the present time, twenty-eight (28) municipalities, or seventy (70) percent of the local governments in Erie County, have created planning commissions as shown on Exhibit 1. The primary responsibility of these commissions is to act as an advisory body to the local elected officials in developing policies that will affect the future growth of the municipality. To fulfill this responsibility, state legislation relating to the various forms of local government, permits the planning commission to conduct studies of existing conditions and to develop plans for the future location of public facilities and roads and to guide the general development of the community. In addition, the local planning commission is empowered to prepare administrative procedures and ordinances for legislative consideration as guides and tools in implementing community plans. This process is referred to as comprehensive planning. Exhibit 2 depicts a diagramatic sketch of the comprehensive planning process.

The comprehensive planning program consists of a number of studies of existing conditions that include:

1. Base Maps - community and regional maps showing roads, bodies of water, railroads, airports, municipal facilities, and major natural features.
2. Population - a detailed analysis of the community's human resources, such as age-sex distribution, educational levels, family incomes, occupational groupings, distribution and density of the population. In addition, the study usually includes analysis of past population growth factors and projects the growth of the population into the future.

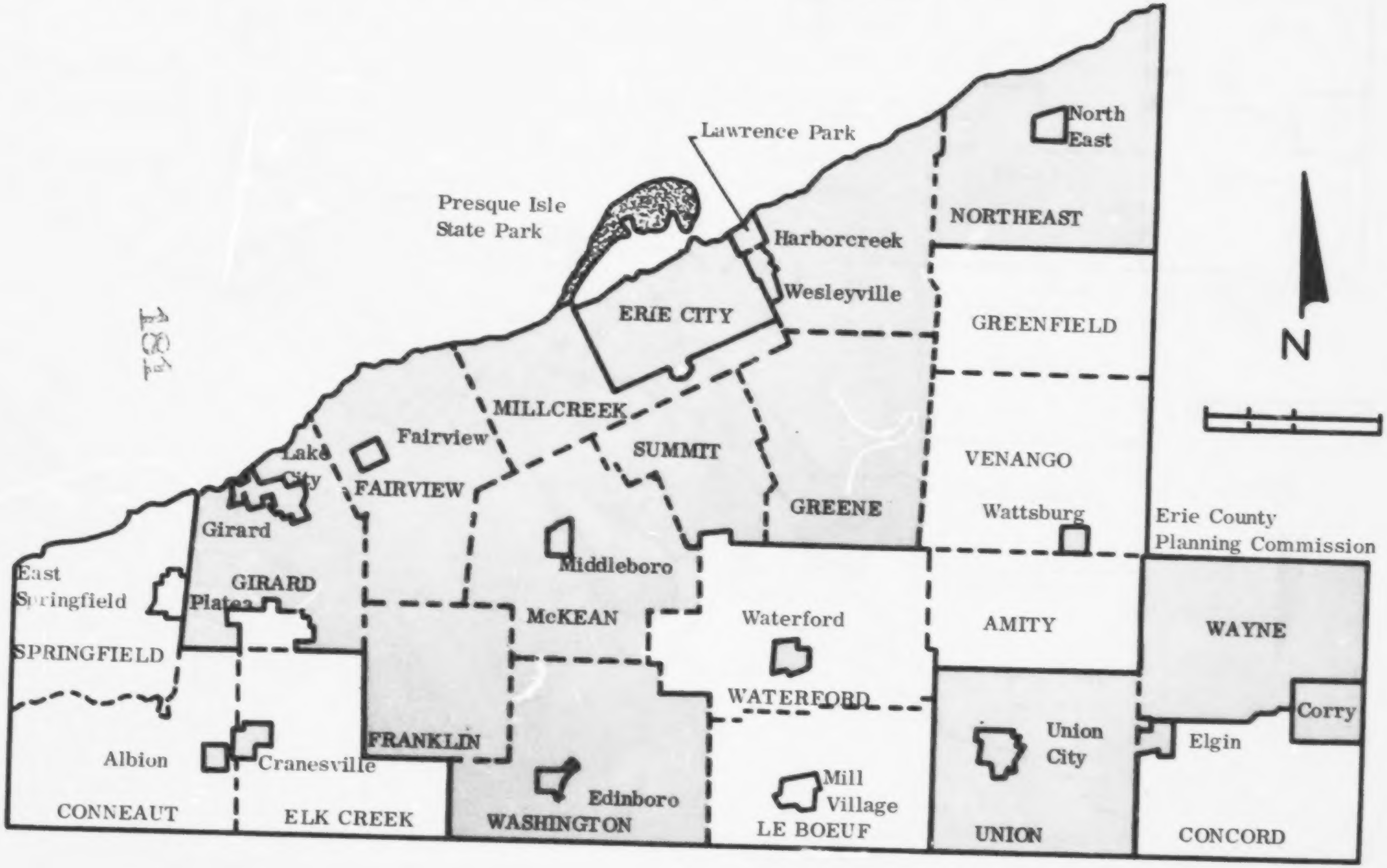
GROWTH OF THE ERIE URBAN AREA


1790
1950
1960
1985
Presque Isle State Park
Lawrence Park
Harbor Creek
Wesleyville
North East
NORTHEAST
GREENFIELD
VENANGO
Wattsburg
N
0 1.5 3 6
Erie County Planning Commission
MILLCREEK
Fairview
FAIRVIEW
Lake City
Girard
SUMMIT
GREENE
Middleboro
East Springfield
GIRARD
Platea
McKEAN
Waterford
WATERFORD
AMITY
WAYNE
SPRINGFIELD
FRANKLIN
Corry
Elgin
Mill Village
Union City
Albion
Cranesville
Edinboro
CONNEAUT
ELK CREEK
WASHINGTON
LE BOEUF
UNION
CONCORD

ERIE COUNTY, PENNSYLVANIA

EXHIBIT I

MUNICIPALITIES WITH PLANNING COMMISSIONS


Presque Isle State Park
Lawrence Park
North East
NORTHEAST
Harborcreek
Wesleyville
ERIE CITY
GREENFIELD
N
MILLCREEK
Fairview
SUMMIT
VENANGO
Lake City
FAIRVIEW
GREENE
Wattsburg
Erie County Planning Commission
Girard
Middleboro
East Springfield
GIRARD
Platea
McKEAN
Waterford
AMITY
WAYNE
SPRINGFIELD
WATERFORD
Corry
Union City
Elgin
FRANKLIN
Albion
Cranesville
Mill Village
Edinboro
CONNEAUT
ELK CREEK
WASHINGTON
LE BOEUF
UNION
CONCORD

ERIELAND 2000

PLANNING COMMITTEE

INTRODUCTION

Planning in the Erie area began in 1800 when Andrew Ellicott laid out the original town site. Erie grew for a century with little control, until 1913 when the State Planning Law was adopted, the Erie Planning Commission established, and John Nolen prepared, "A Practical Plan for the Physical Development of Erie." It is now evident that had his plan been followed, many of the problems facing the community today would not have developed, or would have been substantially diminished. In 1929, subdivision regulations were adopted and shortly thereafter, the first permanent staff person charged with the responsibility of physical planning was employed by the city. The Zoning Ordinance was adopted in 1937.

Following the war, community growth accelerated rapidly. Planning and planning studies began to proliferate with a State Traffic Survey in 1948, followed by recreation studies, sewage disposal studies, parking studies, and redevelopment. In 1957, a plan for Erie was completed by Morris Knowles, the first substantial planning effort since John Nolen. In 1957, the County Planning Commission was officially organized, and in 1958, a professional staff was employed to undertake a County Master Plan. In 1960, Maurice E. H. Rotival & Associates were retained by the City, County, and the Citizens Action Committee, to do comprehensive planning studies for the entire Metropolitan Erie Area. Mr. Rotival completed the reconnaissance study and the development of four alternate concepts for the growth and development of Greater Erie. In 1961, the County's Master Plan was completed with the assistance of Section 701 of the Housing Act. Subsequently, the County Planning Commission and its staff have undertaken and completed master plans for Millcreek, Harborcreek, Wesleyville, Girard/Lake City, Green Township, and Union City/Union Township. They have now completed a Master Plan for Summit Township, and have applications pending for Lawrence Park and McKean/Middleboro. They are also preparing an application for Federal Financial Assistance under Section 701 of the Community Facilities Act for a comprehensive revision and up-dating of the County's Master Plan. In 1962, the City's planning staff was expanded and reorganized, and a new Master Plan Study was begun under Section 701 of the Housing Act.

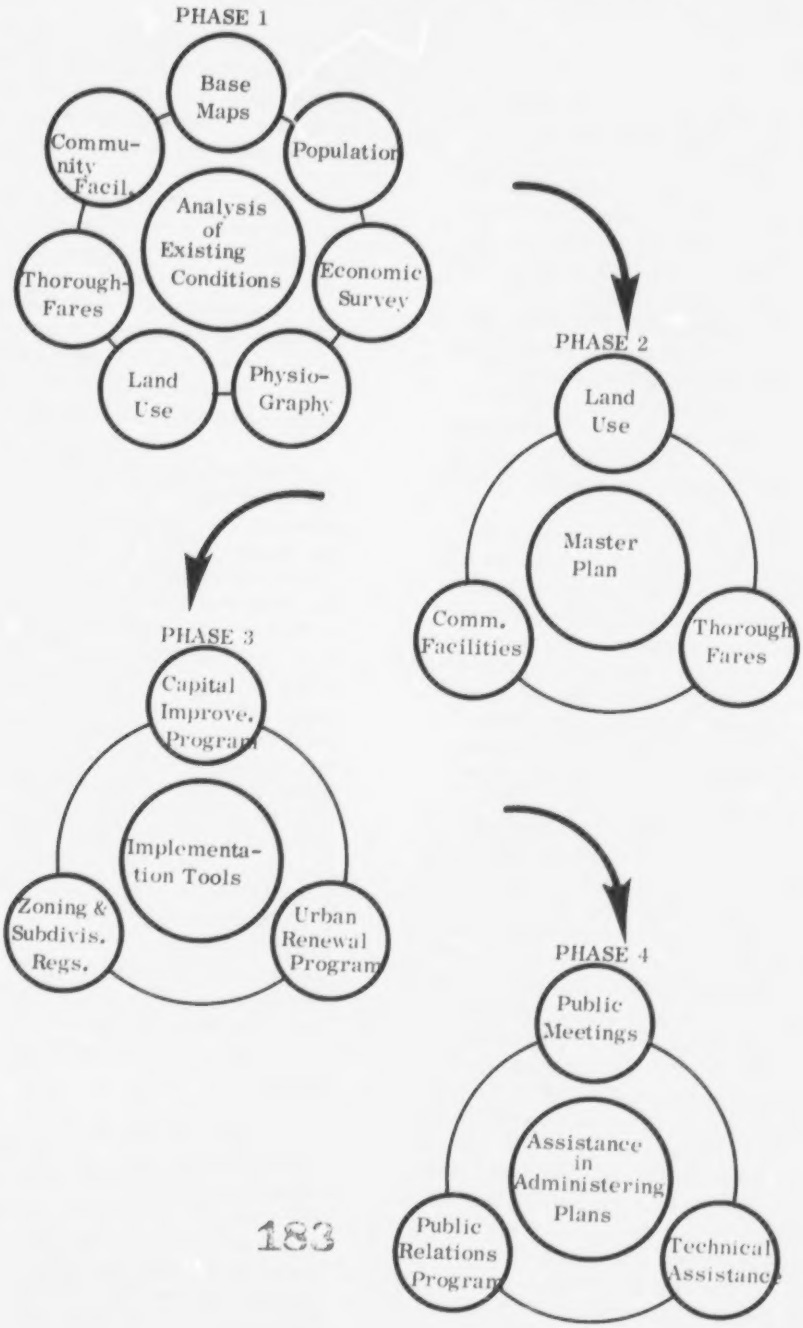
With the assistance and at the insistence of the Federal Government, planning has become an established governmental function throughout Erie County, including the City of Erie and several surrounding municipalities. The results of planning are becoming evident in various programs which are now being implemented: urban renewal, highway construction, capital improvements, and community development.

Major issues facing the area include: continuing industrial and economic development to provide a livelihood for an expanding population, the preservation of the natural features and resources which support tourism, including the elimination of water pollution and air pollution problems; the supply of adequate, safe water to the new and existing suburban development which requires the expansion of existing water supply and treatment facilities, the adequate and safe disposal of storm water, sanitary sewage, garbage and refuse, and scrap materials, especially junk automobiles; the preservation, expansion, and development of adequate community facilities and services in health, education, and recreation; the preservation, restoration and renewal of the sound old neighborhoods throughout the area, which are deteriorating under the ravages of time and obsolescence; and the provision of safe, adequate, and efficient transportation facilities, primarily highways and thorofares, for the movement of goods and people through, into, and about the Erie Metropolitan Area.

Both the City and County Planning Commissions have suffered from the National shortage of trained and qualified planning technicians. Both the city and county from time-to-time, have augmented their staff resources with outside consultants. A somewhat greater administrative burden upon the City staff has reduced its effectiveness in long-range planning and has necessitated

EXHIBIT 2

COMPREHENSIVE PLANNING PROGRAM


PHASE 1
Base Maps
Populatio
Community Facil.
Analysis of Existing Conditions
Economic Survey
Thorough-Fares
Land Use
Physio-Graphy
PHASE 2
Land Use
Master Plan
Comm. Facilities
Thorough Fares
PHASE 3
Capital Improve. Progra
Implementation Tools
Zoning & Subdivis. Regs.
Urban Renewal Progra
PHASE 4
Public Meetings
Assistance in Administering Plans
Public Relations Progra
Technical Assistanc

3. Economic Base - analysis and evaluation of the community's commercial and industrial development and the potential of the community to attract new and retain existing individual and commercial establishments.

4. Physiography - a detailed analysis of surface and subsurface soil conditions and how these conditions affect density of development, public utility requirements and the location of roads and other municipal facilities.

5. Land Use - existing land uses, the factors that have contributed to these conditions, relationship between the various land uses, and the effects these conditions have upon the physical environment of the community.

6. Thoroughfares - an evaluation of the existing streets and highway system in the community, how this sytem effects the various elements of the community environment, and the adequacy of the system to meet additional traffic flow.

7. Community facilities - an evaluation of existing community facilities, such as schools, parks, libraries, municipal buildings, water and sewer systems, police and fire protection facilities and cultural facilities as they relate to the quality of over-all community environment and development.

In addition to the above studies, a comprehensive palnning program includes the preparation of plans for future land use; thoroughfares and community facilities. However, plan development by itself will not result in bringing improvements to the community. The commission must also prepare and recommend ordinances and programs for the local government to utilize in implementing these plans.

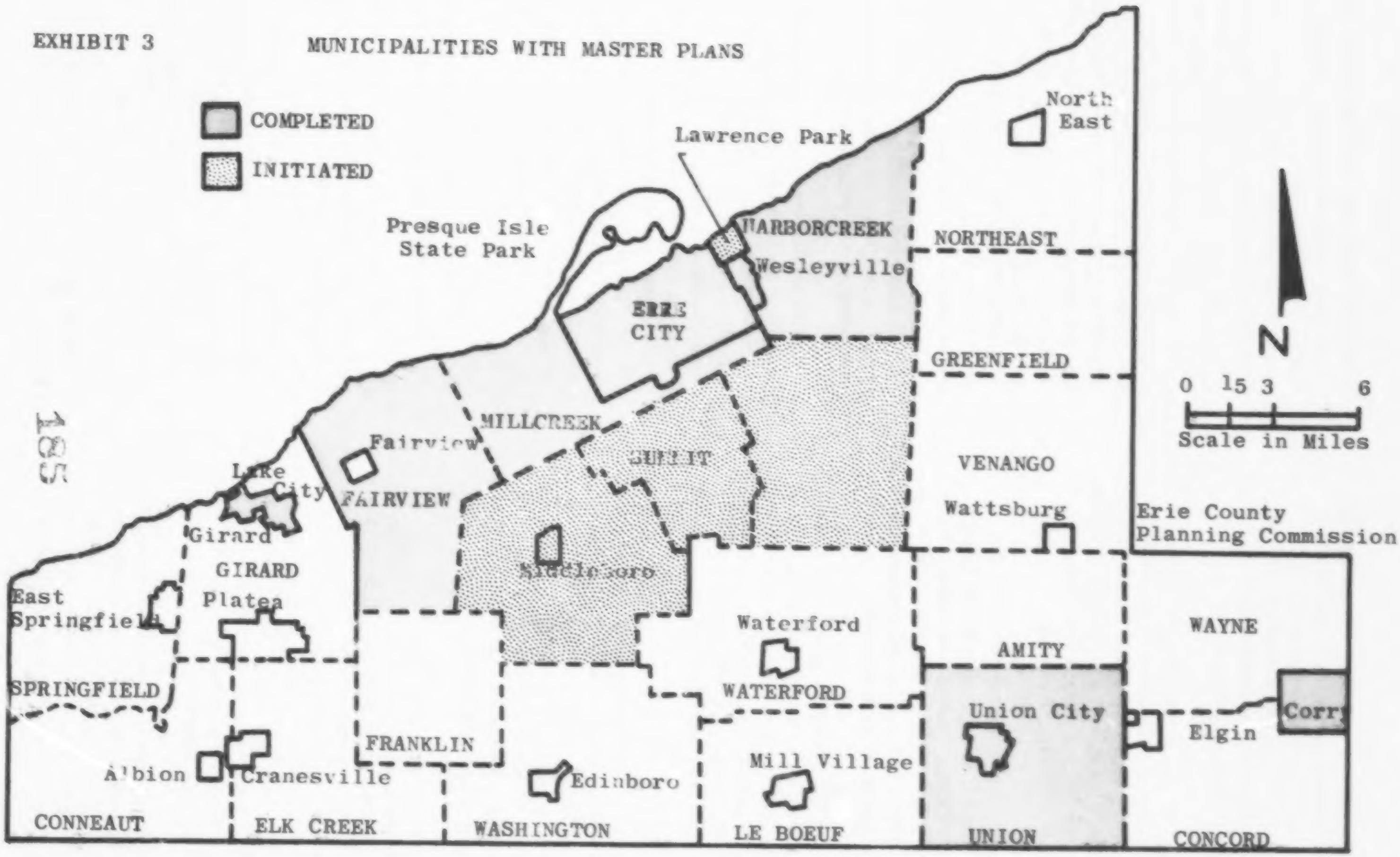
The land use plan provides the community with development policies and goals that will be most beneficial to the municipality. The plan also reflects land use arrangements that are economical from the standpoint of providing municipal services, promote higher land values and reduce conflicts between competing uses of land. The thoroughfare plan attempts to achieve the same aims as the land use plan, by providing the community with a logical highway system. This system must move traffic efficiently, be harmonious with the proposed land use pattern, provide a framework for relating the various land uses in the community to one another, and integrate the community into the economic and social life of the region. The community facilities plan has a significant impact upon all aspects of the community's environment and growth. The proposals relating to schools and public utilities will affect the location of various land uses, as well as the density and speed of development of these uses. The various cultural facilities, such as libraries, parks, and municipal buildings will also affect the land use pattern. These facilities will have an affect upon the quality of the community's living environment.

To implement these various plans, it is necessary to have adequate programs and administrative rules. The planning commission, as part of its duties, prepares zoning and subdivision ordinances, and various codes that promote the health, safety and welfare of the community. These codes and ordinances are then presented to the legislative body of the municipality for enactment and enforcement. In addition, the commission prepares a capital improvements program that will be utilized in implementing various proposals made in the thoroughfare and community facilities plans. The commission usually provides the initiative in the community for the preparation of an urban renewal program for the municipality, if such a program is needed.

At the present time, fifteen of the municipal planning commissions in Erie County have initiated comprehensive planning programs. These communities are identified on Exhibit 3. Of these, eleven have completed the preparation of a comprehensive plan, and are in the process of implementing same. However, since all the plans were completed within the past two years, progress in implementation has been negligible. Enforcement of zoning and subdivision controls have been the most noticeable activities of the local commissions. In recent months, additional activity has occurred with the preparation of applications for urban renewal programs in a

EXHIBIT 3

MUNICIPALITIES WITH MASTER PLANS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Erie County Planning Commission

number of local municipalities, while others have begun to enact various codes to protect the health, welfare, and safety of the community, or have begun scheduling various capital improvements.

A comprehensive community planning program, however, has not been instituted in all of the municipalities having planning commissions. In these municipalities, development is sparce and rural in character. Since the prospect for urbanization in the near future is virtually non-existent, the desire or need to enter into a comprehensive planning program has not developed. For the most part, these rural communities have relied upon the Erie County Master Plan and other county-wide studies as the basis for developmental policy decisions. To make progress in implementing these policies, many of the municipalities have enacted zoning and subdivision ordinances and other codes for the general protection of the public's health, such as septic tank ordinances. In a majority of instances, these rural communities prepared and enacted codes without professional assistance. As a result, these ordinances generally reflect outmoded standards and concepts. In recent years, the Erie County Planning Department has been active in providing municipalities with professional assistance in preparing ordinances for the purpose of controlling the development of land. (See Exhibit 6.)

In rural areas, change usually occurs slowly making it difficult to assess the effectiveness of local planning programs. Therefore, it is probably safe to assume that the enforcement of zoning and subdivision controls has not been as effective as it could have been. The speed with which change occurs may be increasing in Erie County's rural areas. New highway construction, recreation development, and an expanding economy may induce a fairly rapid rate of urbanization throughout the County. With this prospect on the horizon, many of the local planning commissions are requesting assistance in preparing new or updating old development control ordinances. Even if development trends in rural areas do not accelerate, it is anticipated that the effectiveness of local planning commissions in controlling growth within their jurisdiction will increase. This assessment is based on the fact that request for advice and assistance in preparing and enforcing these controls is being received by the County Planning Department in an increasing frequency. An added impetus to this trend is expected to result from the adoption and enforcement of county-wide land subdivision regulations.

As part of the County Planning Department's municipal assistance program, the Department's professional staff has prepared manuals on subdivision regulations, and on zoning ordinances. Through the use of graphics and explanatory text, the planning concepts, on which these land use controls are based, are explained in non-technical terms. The manuals also include discussions on the procedures required to effectively enforce these controls. In the Zoning Manual, a skeleton model of a modern zoning ordinance is presented, detailing the purpose of each section of the ordinances. These manuals have received wide dissemination among local elected officials, local planning commissions, and other local agencies that are concerned with the enforcement and administration of these controls.

Extent and Adequacy of Environmental Health Planning

Environmental health planning in Erie County has had a similar pattern of development as did comprehensive municipal planning. In the past, many of the factors affecting the environmental health of a community were dealt with as separate elements and on an individual case basis. Therefore, it was virtually impossible to apply uniform standards or procedures to prevent or eliminate these hazardous conditions. Although there are state laws to control certain aspects of environmental health, such as air and water pollution, the prime responsibility for controlling the environmental health of the community lies with the locally elected officials.

At the present time, the fifteen communities that have initiated community comprehensive programs are initiating projects and enacting local legislation that will affect the environmental health of the community. Fortunately, the factors affecting environmental health are considered in relationship with the over-all development of the community and not as individual items, as was the case in the past. The various elements of environmental health that are duscussed in the comprehensive plan or controlled by ordinances include: public utilities, flood plan and soil conditions, air and water pollution, density of development, and codes to protect the health, welfare, and safety of the general public.

Public utilities - water supply, sanitary sewage treatment and storm drainage - are vital to both environmental health and community growth. Throughout the preparation of the comprehensive plan and the accompanying implementation tools (codes, ordinances, and capital improvements program), utilities are of prime consideration. Within the text of the plan, utilities are discussed in terms of adequacy of existing services, potential of the system for serve future growth and areas requiring service. Also discussed is how local government can utilize the installation or expansion of the utility systems to influence the growth patterns. In areas where a public utility system does not exist, the plan discusses various alternative methods of providing these services. Standards for implementing these recommendations are included in many of the codes, ordinances, and financial programs prepared as part of the comprehensive planning program. The subdivision and zoning ordinances set the criteria for requiring public utilities, such as density of development, availability of the ssytem to new development or by determination of the state and local health agencies. The capital improvements program is another document that usually contains some reference to public utilities. In this document, the planning and phasing construction of improvements are scheduled, and methods and sources of financing are detailed.

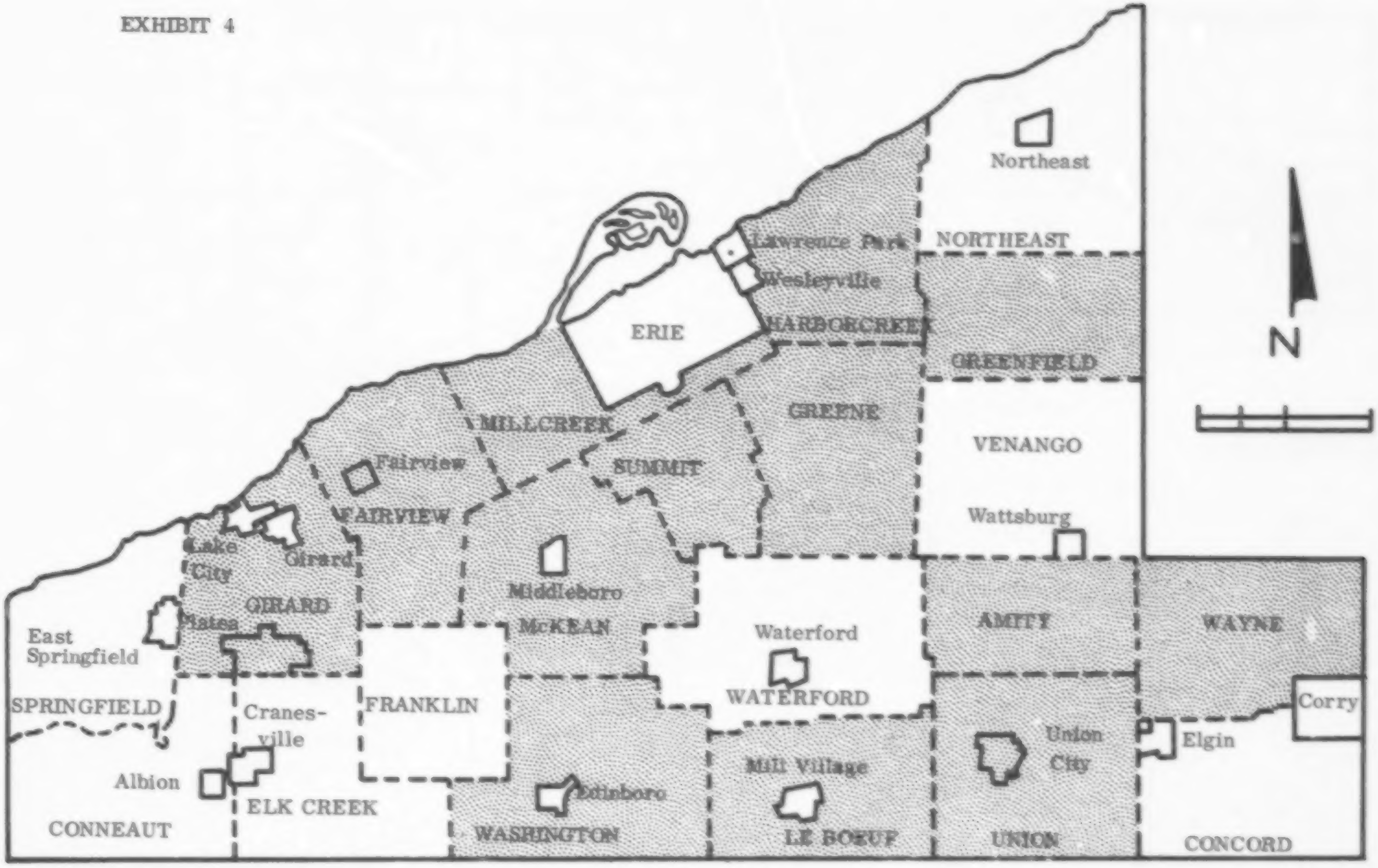
In addition to locally enacted design criteria, the County has included standards for the provision of public utilities in the recently enacted County Subdivision Regulation, which are effective in those Townships in Erie County that do not administer their own regulations. Moreover, the County has also contracted with a professional engineering firm to study the feasibility of a metropolitan water supply and distribution. After a full year of study, the creation of a metropolitan organization to provide water has not only been shown to be feasible, but has also been shown to be imperative if the metropolitan area is to grow in an unimpeded manner. County Commissioners are now considering the creation of a Metropolitan Water and Sewer Authority, and have allocated funds in the 1966 budget for the Authority's first year of operation. Although a sewer study for the metropolitan area has not been prepared, the proposed authority will, in all probability, provide sanitary sewage treatment facilities as additional development occurs.

Among the major factors affecting a community's environmental health are sub-soil conditions and areas subject to periodic flooding. Since these factors affect both the pattern and density of development, there is generally considerable discussion of these conditions in the comprehensive plan. In addition to identifying areas that are subject to periodic flooding from local streams, subsoil conditions as related to drainage qualities, construction qualities and water table levels are explored. Together with slope analysis, the surface and sub-surface conditions provide a logical foundation for recommendations regarding density of development, type of development, location of municipal facilities and the necessity of providing public utilities. The zoning and subdivision ordinances engineers, that accompany the comprehensive plan, also take surface and sub-surface soil conditions into consideration.

The County Planning Department has been encouraging local municipalities to adopt flood plain zoning as part of the local zoning ordinance. It is also recommended that density of residential development be governed by the accessibility of public utilities. The subdivision regulations, as well as the zoning ordinance, state lot size requirements on the basis of availability of public utilities. If public sanitary sewers are not available, the subdivision regulations provide standards for community "package" treatment plants or for on-site treatment facilities (septic tanks). In addition, many municipalities have also passed septic tank ordinances, shown on Exhibit 4, that designate percolation rates for soils and disposal field designs.

Two of the fastest growing dangers to the environmental health of a community and a region, are air and water pollution. At the present time, preventive action and legislation has primarily been the responsibility of the State. However,

EXHIBIT 4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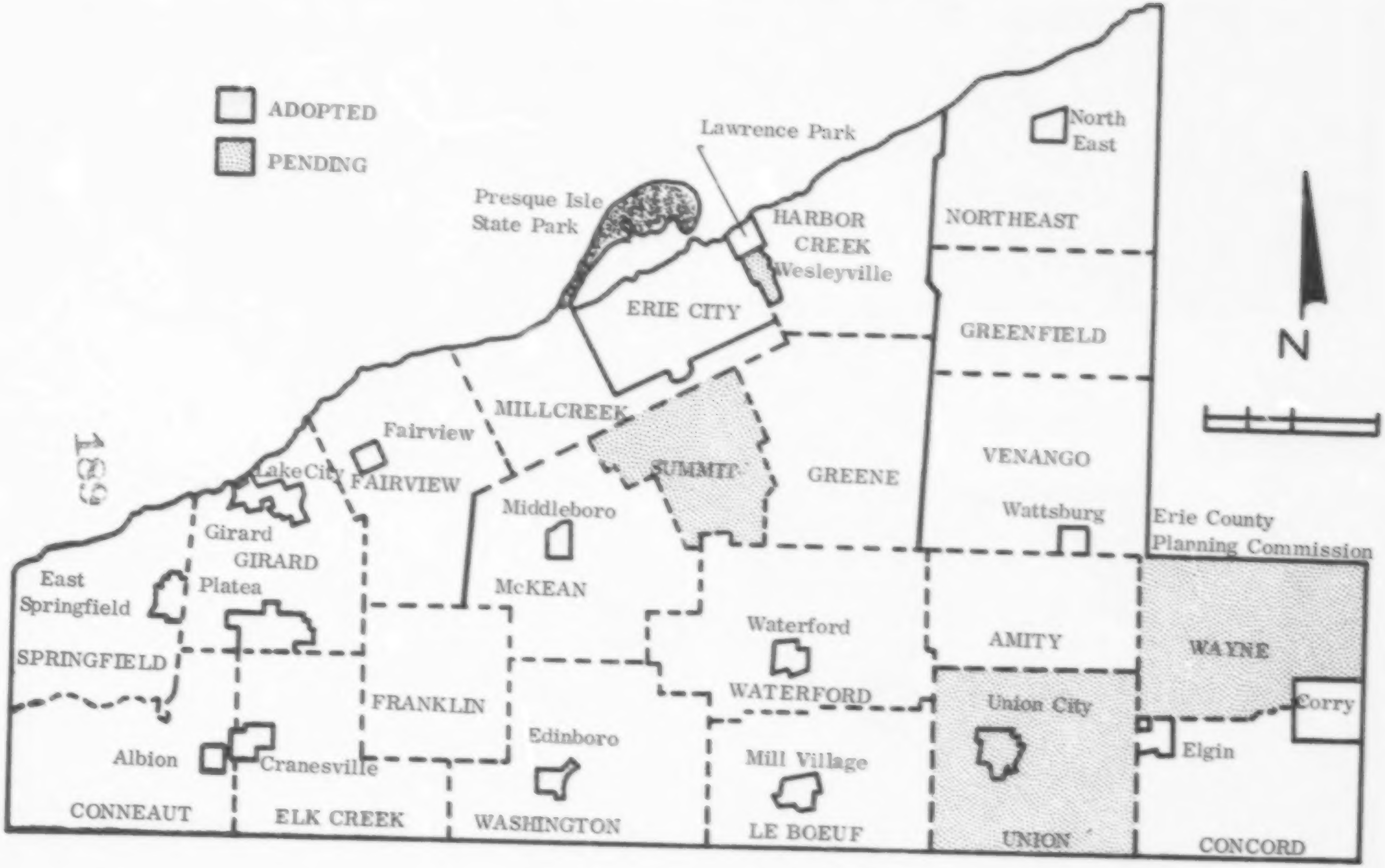
SEPTIC TANK ORDINANCES

EXHIBIT 5

MUNICIPALITIES WITH SUBDIVISION REGULATIONS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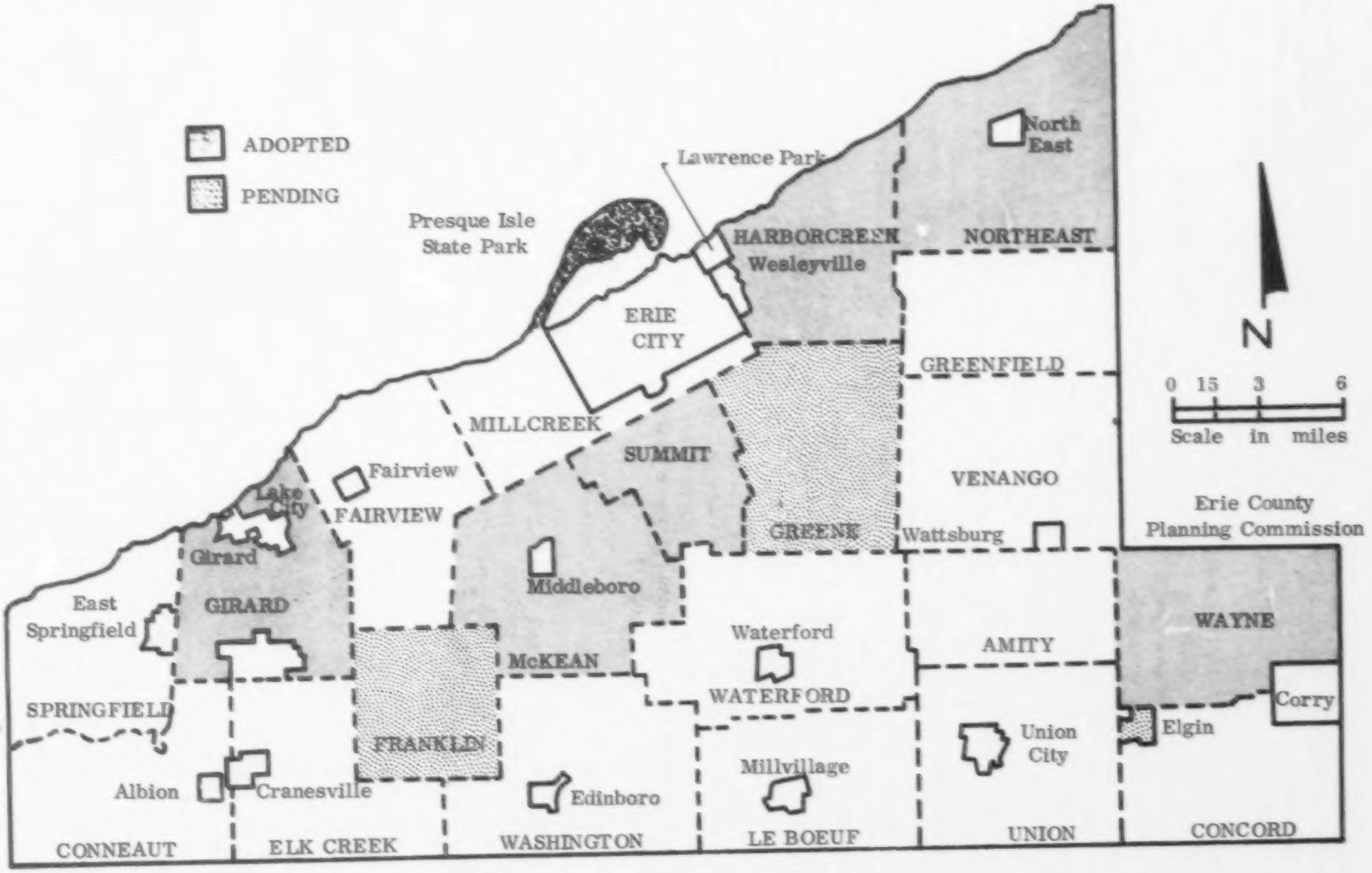
Erie County Planning Commission

FIGURE 6

MUNICIPALITIES WITH ZONING ORDINANCES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Scale in miles
Erie County Planning Commission

in most cases, the applicable laws and administrative procedures are brought to bear only after a violation has occurred. Zoning ordinances that are prepared by the County Planning Department include performance standards that are applicable primarily in industrial and commercial areas. The most important standards in relation to environmental health planning are the controls of noxious gases, odors, and smoke emission. Unfortunately many of the zoning ordinances now in effect, were adopted prior to the general acceptance of performance standards as a proper item for control by a municipality.

In the field of water pollution, the County is extremely limited legislatively. However, municipalities can take action and pass legislation to help alleviate the problem. The provision for public sewage treatment facilities, community "package" treatment plants or the correct installation of on-site disposal units has been discussed previously. Many municipalities, in addition to the above cited ordinances have also passed garbage and refuse, depicted on Exhibit 7, and junk yard ordinances, indicated on Exhibit 8. In certain instances, these ordinances provide regulations for the location of these facilities so that the possibility of contaminating local bodies of water are prevented.

Because of the density of development in many of the municipalities in the County, it is becoming increasingly important to adopy a variety of codes that will promote, protect, and enhance the health of the community's populace. These codes include plumbing, housing, building, electrical, and fire prevention.

The comprehensive plans prepared by the County Planning Department, for both urban or urbanizing municipalities, recommend the adoption of these codes, and all of the other measures cited previously in this report. To-date, the most universally accepted codes and ordinances have been zoning, subdivision, septic tank, junk yard and garbage and refuse disposal controls, as can be seen on the accompanying maps. Although control of environmental health factors has been a part of municipal policy in most of the communities in Erie County, there has been little coordination between communities or even within a municipality that has adopted a number of such controls. However, with increased exposure of the problems connected with environmental health, coordinated activity is beginning to take place and it is anticipated that this activity will continue to expand and intensify with time.

LEGISLATION

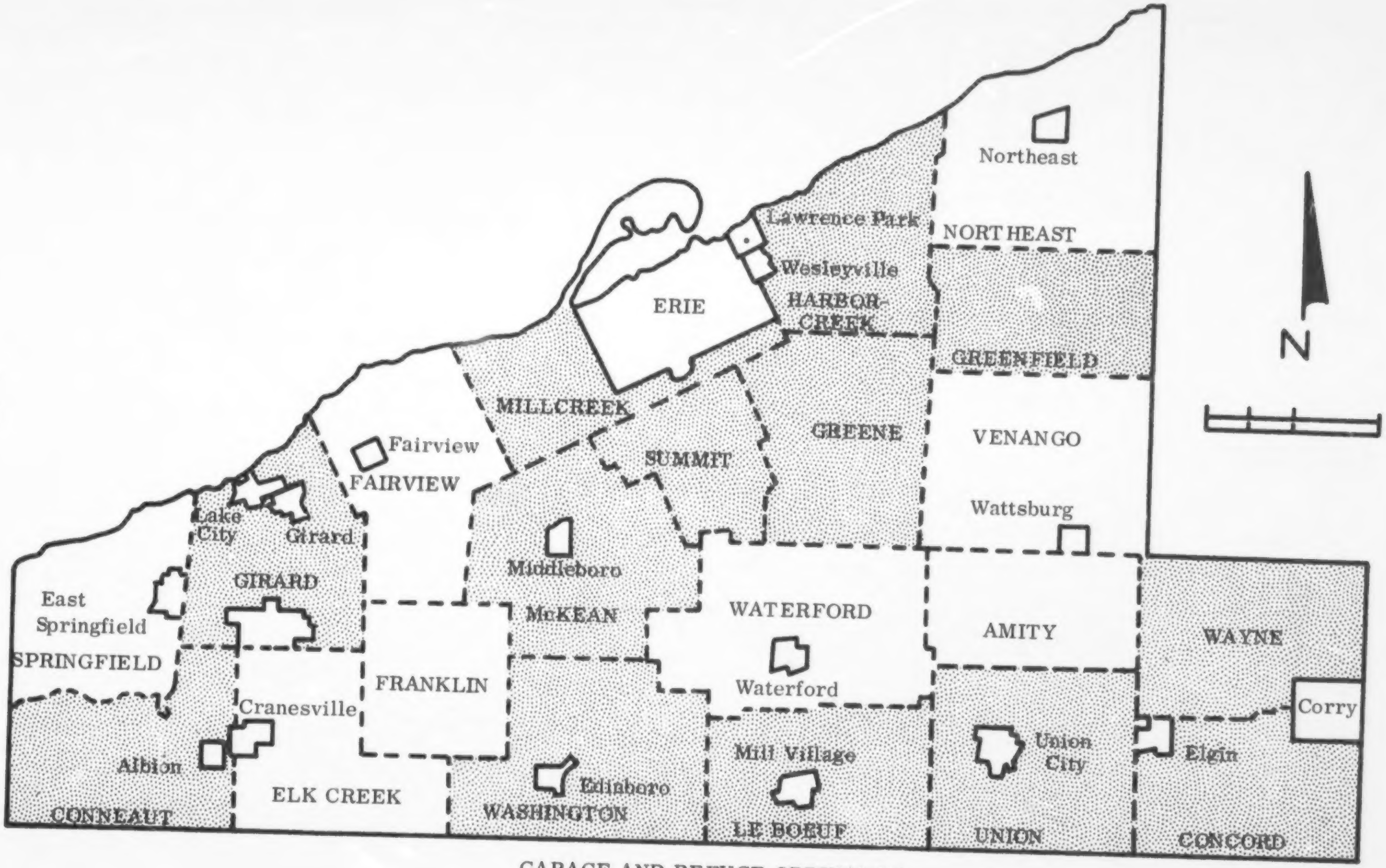
This phase of the report will examine Pennsylvania enabling legislation that is relevant to municipal planning and environmental health, in an attempt to evaluate the adequacy and effectiveness of this legislation as a basis for local environmental health planning laws. These local laws are as follows: zoning ordinances; subdivision regulations; building, housing, plumbing, and electrial codes; drainage control; solid waste disposal ordinances; septic tank ordinances; air pollution ordinances; water pollution ordinances.

In Pennsylvania, local enabling legislation, called codes, is written according to the various categories of political subdivisions. The various codes are as follows: county code (1st through 8th class counties); 1st class township code; 2nd class township code; town code; borough code; 3rd class city code; 2nd class city code; 1st class city code.

The classification types (1st, 2nd, 3rd, etc.) for the state's political subdivisions are generally based on the municipality's population and can only be changed by act of the state legislature (General Assembly). The classification system is becoming outdated, however, as boroughs and 1st class townships generally have the same powers and, in many cases, boroughs contain a larger population than third class cities. Also, there is only one municpality classified as a town. Further, it could be argued that the town, the second class city and the first class city legislation are discriminatory, as the only second class city is Pittsburgh and the only first class city is Philadelphia.

Pennsylvania is one of the few states which has incorporated provisions regarding zoning, into its constitution. Also, zoning and planning provisions are contained in the General Municipal Law and in separate zoning enabling acts enacted for each of the different classes of municipalities.

EXHIBIT 7



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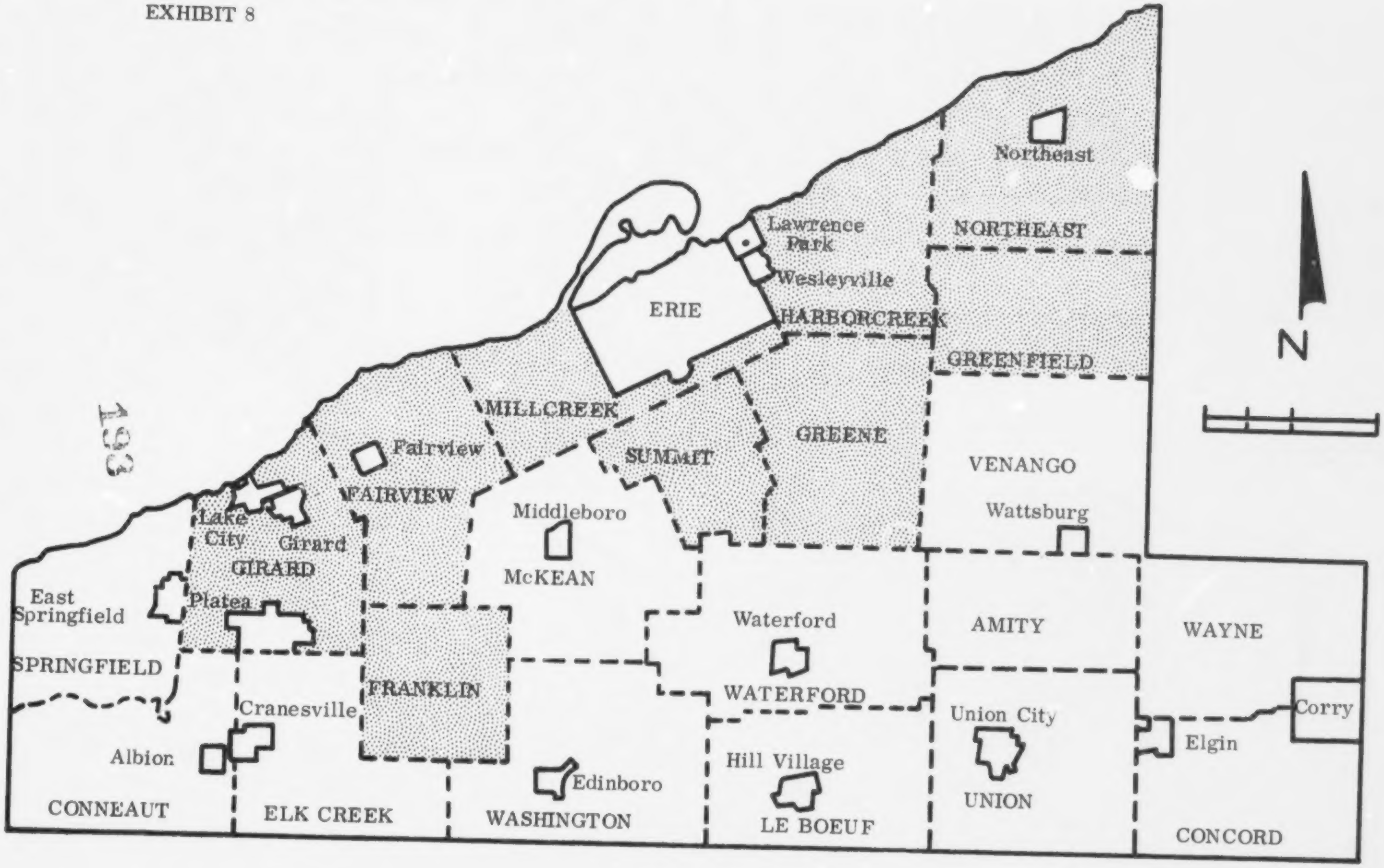
GARAGE AND REFUGE ORDINANCE

EXHIBIT 8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Hill Village
Edinboro
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ELK CREEK
WASHINGTON
LE BOEUF
CONCORD

JUNK YARD ORDINANCE

TABLE 1

ERIE COUNTY POLITICAL SUBDIVISIONS

2nd Class Twps.	1st Class Twps.	Boroughs	3rd Class Cities
Amity	Lawrence Park	Albion	Erie
Concord		Cranesville	Corry
Conneaut		East Springfield	
Elk Creek		Edinboro	
Fairview		Elgin	
Franklin		Fairview	
Girard		Girard	
Greene		Lake City	
Greenfield		Middelboro	
Harborcreek		Mill Village	
LeBoeuf		North East	
McKean		Platea	
Millcreek		Union City	
North East		Waterford	
Springfield		Wattsburg	
Summit		Wesleyville	
Union			
Venago			
Washington			
Waterford			
Wayne			

Erie County, a third-class county, contains twenty-one second-class townships, one first-class township, sixteen boroughs and two third-class cities, as outlined in Table 1.

State Legislation Regarding Planning and Environmental Health

The state enabling legislation relating to the planning aspects of environmental health for the various municipal government types in Erie County is as follows:

1. The planning legislation for the third-class counties, (1) as Erie County, includes a provision for the county to create a county planning commission as follows. "The County Planning Commission shall consist of nine members to be appointed by the county commissioners. All appointees shall be residents of the county, and shall be appointed with due consideration to geographical and population factors. All appointees shall have knowledge and experience in respect to one or more of the following subjects; finance, commerce, industry, agriculture, transportation, architecture, real estate, building, engineering, social welfare, health, civic administration and law. At least seven of such appointees... shall not be paid county employees."

   "They (the planning commission members) shall make and alter rules and regulations for their own organization and procedure consistent with the resolutions of the county commissioners and the law of the Commonwealth."

   "All members shall serve without compensation, and shall make an annual report, to the county commissioners, showing their transactions and recommendations. They may employ engineers and other persons whose salaries and wages, together with other necessary

> expenses of the commission shall be provided for, in the discretion of the county commissioners, by proper appropriations and resolutions."
>
> "The county planning commission may also receive and expend for the purposes of its planning work, including planning work in or for cities, boroughs, townships, and towns within the county, any gifts, grants, and appropriations from any other source... and may contract with governmental or private agencies or individuals with respect thereto."
>
> "The County planning commission may be given the additional power and duty of serving as the county zoning commission, with all the powers and duties that have been or may be conferred upon such county zoning commission by law."

The powers and duties of the county planning comission are outlined in Sections 2002-2008, of Article XX, County Code, that are in addition to the general description and powers given above. The main provisions of these additional powers and duties are as follows:

a. Section 2002. "All resolutions of the county commissioners relating to the location of any public buildings in the county, and to the location, extension, widening, enlargement, ornamentation, or paving of any street, boulevard, parkway, bridge, tunnel, subway or underground road, park, playground, or other public grounds, to the location or preservation of ancient landmarks, and other property of historical or autiquarian interest, to the vacation of any highway or portion thereof, or to the making or alteration of the county plan of highways, or to any surface, underground or elevated railway, shall be furnished to the County Planning Commission...." "The Planning Commission may make a report, or suggestion in relation thereto...."

b. Section 2003. "The County Planning Commission may appear in any proceeding with reference to the opening or vacation of any public road or highway, bridge, tunnel, subway or underground road..."

c. Section 2004. "The County Planning Commission shall have jurisdiction and control of the subdivision of land located within the county limits. For the purpose of this section, a subdivision shall be construed to be:.... all plans, plots, and replots of land laid out in building lots, and the streets, highways, alleys, or other portions of the same, intended to be dedicated to public use, or the use of purchasers or owners of lots fronting thereon or adjacent thereto, located within the county limits, except those located within a city or borough or within a township having adopted by resolution or ordinance land subdivision regulations, shall be submitted to the County Planning Commission, if one has been created, and approved by it before they shall be recorded.".... "The disapproval of any such plan by the County Planning Commission shall be deemed a refusal of the proposed dedication shown thereon. The approval of the commission shall be deemed an acceptance of the proposed dedication..."

d. Section 2005. "The County Planning Commission may make or cause to be made... caused to be published, a map or maps of the county and any portion or portions thereof,..."

e. Section 2006. "It (the County Planning Commission) may make recommendations to the County Commissioners, from time to time, concerning any such matters and things aforesaid..."

> "The County Planning Commission may make recommendations to any public authorities or any corporations or individuals in such counties with reference to the location of any buildings, structures, or works to be erected or constructed by them."

f. Section 2007. "The County Planning Commission shall encourage the cooperation of the political subdivisions within the county..."

g. Section 2008. "Before the approval of a plot of any city, borough, town, or township authority having the power of approval of plots, such authority shall transmit a copy of the proposed plot to the County Planning Commission... and the commission shall make a report thereon..."

Sections 2020 through 2039, Article XX, outline the zoning powers of the County. The main provisions of these powers are as follows:

a. Section 2020. "The Board of County Commissioners of any county is hereby empowered... to regulate in any portion of such county which does not lie within a city, borough, or township having a zoning ordinance in effect, the location, heights, bulk and size of buildings and other structures, the percentage of lot which may be occupied, the size of yards, courts and other open spaces, the density and distribution of population, the uses of buildings and structures for trade, industry, residence, recreation, public activities, or other purposes, and the uses of land for trade, industry, residence, recreation, agriculture, water supply, conservation, soil conservation, forestry, sanitary landfills, or other purposes..."

b. Section 2021. "In any county where a planning commission has been... established, the Board of County Commissioners may, in lieu of establishing a zoning commission.. confer and impose on such planning commission the additional power and duty of serving as the county zoning commission, with all the powers and duties conferred by this subdivision upon the county zoning commission.."

c. Section 2022. "The zoning commission may employ such trained personnel as the funds provided therefore may permit...."

d. Section 2023. "It shall be the duty of the zoning commission... to make for certification to the Board of County Commissioners... a zoning plan or plans, including both the full text of the zoning ordinance or ordinances and the maps, and presenting the recommendations of the commission for the regulation by districts or zones of the location, height, bulk, and size of buildings and other structures, percentage of lot which may be occupied, the size of lots, courts and other open spaces, the density and distribution of population, the location and use of buildings and structures for trade, industry, residence, recreation, public activities, or other purposes, and the use of land for trade, industry, recreation,agriculture, forestry, soil conservation, water supply conservation, sanitary landfills, or other purposes..."

e. Section 2024. "From... the time when a zoning commission of any county,... makes, adopts, and certifies to the Board of County Commissioners of its county, each zoning plan... then the Board of County Commissioners may, by ordinance... divide the territory of the county which lies outside of municipalities which now have and enforce zoning ordinances into districts or zones of such number, shape, or area as it may determine. Within such districts or any of them, they may regulate the erection, construction, reconstruction, alteration, and uses of buildings and structures and the uses of land, and may require and provide for the issuance of building permits as a condition precedent to the right to erect, construct, reconstruct, or alter any building or structure within any district covered by such zoning ordinance. All such regulations shall be uniform for each class or kind of buildings throughout any district, but the regulations in one district may differ from those in other districts..."

f. Section 2026. "Such regulations (zoning) shall be designed and enacted for the purpose of promoting the health safety, morals, convenience, order, prosperity, or welfare of the present and future inhabitants of the Commonwealth of Pennsylvania, including amongst other things, the lessening of congestion in the streets or roads, or reducing the waste of excessive amounts of roads, securing safety from fire and other dangers, providing adequate light and air, preventing on the one hand excessive concentration of population, and on the other hand, excessive and wasteful scattering of population or settlement, promoting such distribution of population, and such classification of land uses and distribution of land development and utilization as will tend to facilitate and conserve adequate provisions for transportation, water flowage, water supply, drainage, sanitation, educational opportunities, recreation soil fertility, food supply, protection of the tax base, securing economy in governmental expenditures, fostering the Commonwealth's agricultural and other industries, and the protection of both urban and nonurban development..."

g. Section 2027. "The Board of County Commissioners may...amend the number, shape, boundary, or area of any districts...but no such amendment shall be made or become effective until the same shall have been proposed by or be first submitted for approval disapproval, or suggestions to the zoning commission and the Pennsylvania State Planning Board..."

h. Section 2029. "The Board of County Commissioners of any county which enacts zoning regulations...shall provide for a board of adjustment..." "the board of adjustment may, in appropriate cases and subject to appropriate principals, standards, rules, conditions, and safeguards, set forth in the zoning ordinance, make special exceptions to the terms of the zoning regulations. The commissioners may also authorize the board of adjustment to interpret the zoning maps and pass upon disputed questions of lot lies or similar questions as they may arise..."

i. Section 2030. "Appeals to the board of adjustment may be taken by any person aggrieved by his inability to obtain a building permit or by the decision of any administrative offices or agency based upon or made in the course of the administration or enforcement of the provisions of the zoning ordinance..."

j. Section 2032. "In case any building or structure is or is proposed to be erected, constructed, reconstructed, altered, maintained or used, or any land is proposed to be used, in violation of this subdivison or of any regulation or provision of any ordinance or amendment thereof enacted or adopted by any board of county commissioners...the district attorney of the county or any owner of the real estate within the district in which such building structure or land is situated, may, in addition to other remedies provided by law, institute injunctions, mandamns, abatement or any other appropriate action or actions, proceeding, or proceedings to prevent, enjoin, abate, or remove such urlawful erection, construction, reconstruction, alteration, maintenance, or use..."

k. Section 2038. "This subdivision shall not apply to any existing or proposed building, structure or extension thereof, used or to be used by public utility corporations, if upon petition of the corporation, the Pennsylvania Public Utility Commission shall, after a public hearing, decide that the present or proposed situation of the building or structure in question is reasonably necessary for the convenience or welfare of the public."

The legislation regarding health agencies for counties, stated in Article XXI, Section 2101. "The Board of County Commissioners may provide and annually appropriate...as they deem necessary for the protection of the health, cleanliness, convenience, comfort, and safety of the people of the county." Further, this legislation regarding environmental health laws, continues as follows.

a. Section 2132. "The Board of County Commissioners may appropriate monies... to aid cities of the third class, boroughs, incorporated towns or townships in the construction or maintenance of sewers or sewage treatment works, where such sewers and treatment works have been first approved by the Sanitary Water Board of the State Department of Health..."

b. Section 1250. "The County Commissioners shall have power to eliminate all breeding places of mosquitoes... within the county and to do and perform all acts... which... may be necessary or proper for the elimination of breeding places of mosquitoes, or which will tend to exterminate mosquitoes within said county."

"Any water, in which mosquito larvae breed, is hereby declared a public nuisance and subject to abatement as such."

Section 2396, Article XXIII outlines the county power to acquire land for garbage and refuse disposal plants and incinerators, as follows: "Any county may acquire by gift, lease, purchase by current revenues, borrowing or incurring indebtedness, or eminent domain, real property within said county for the purpose of erecting thereon garbage and refuse disposal facilities, and shall have the power to erect and maintain suitable buildings for such facilities and for incinerating furnaces to be operated by the county..."

Regarding water and flooding, Section 1947, Article XIX states as follows: "The Board of County Commissioners may borrow, appropriate and expend money, and may acquire by purchase or dedication real property or any interest therein, for the puprose of cleansing, regulating, improving and controlling rivers, streams, and other bodies of water and storm water drainage systems lying within the boundaries of the county..."

"The Commissioners may also make appropriations and expenditures for the purpose of investigating and examining or for assisting in the investigation or examination of the condition of such waters..."

2. 1st Class Township. The planning legislation for first-class townships, of which Lawrence Park is the only one in Erie County, is contained in the code as Article XXXII, Sections 3201-3203. The township (first class) planning law is quite similar to the county planning law; however, the number of members of the township commission is five, instead of as in the case of counties, and all of the township planning commission members may or may not hold an elective office.

Zoning legislation for first-class townships, also is quite similar to the county zoning laws except, of course, that a township cannot enace and enforce zoning in any other municipality.

Subdivision regulation legislation for first class townships is more specific and detailed than that found in the county code, as subdivision regulations are specifically mentioned in the first-class township code, whereas the county code only implies that a subdivision code or regulations may be developed. The county code places the review and approval power of subdivisions with the county planning commission, whereas the township commissioners adopt and enforce subdivision regulations. Subdivision plans may be referred to the township planning commission for recommendations. Also, the first-class township code has provisions for appeal whereas there are no appeal provisions outlines in the county code for subdivisions.

Regarding water and sewer treatment service and control, the county code only implies that counties may have the authority to install county water systems whereas the first-class township code clearly outlines the procedure for the township to follow in sewer and water control, service, and treatment.

The laws governing the collection of solid wastes (garbage) in first-class townships, is similar to the provisions concerning solid wastes found in the county code.

As in the case of the counties, the first-class townships may create a board of health and employ health officers. In addition, any township may cooperate with the county, or with any city, borough, township or school district in the administration and enforcement of health laws. The township health officer, as well as the county health officer, may abate nuisances in the interest of the public health and welfare. This could be liberally interpreted to mean the condemnation of substandard buildings, disease breeding areas, water pollution, air pollution, etc. Further, the first-class township code provides for the township to adopt and enforce building codes through the hiring of a building inspector.

3. Second-Class Townships. The zoning and planning laws relating to second-class townships are similar to those contained in the first-class township code with the following exceptions. No set-back or building lines may be adopted except along highways or roads. The grant of power to zone in second-class townships is suspended in all or any part of the township whenever any zoning ordinance is in effect which has been adopted by the county commissioners; this suspension also applies to township zoning ordinances adopted before county zoning ordinances. (There is a lack of agreement with the second-class township code and the county code on this point, as the county code states that the county cannot enforce zoning in townships that have adopted zoning ordinances.)

   If fifty-one percent or more of the assessed values of property in the township is represented in a protest to any proposed township zoning ordinances, and the protest in writing is filed with the county prothonotary, the proposed ordinances cannot take effect for two years.

   Also, in second-class townships, provisions of the zoning ordinance need not be advertised or recorded as in other cases. Building and construction regulations in the ordinance may be supplied by reference to a standard building code, approved by the Department of Internal Affairs, or provision typed under supervision of the board of supervisors, or a combination of such. They shall be made available to the public and may be recorded by being attached to the ordinance book.

   In second-class townships, the zoning ordinance must be based on a comprehensive plan. This statement was not found in the county code or in the first-class township laws.

   The second-class township laws are similar to the first-class township laws regarding subdivision regulations, however, the subdivision regulation laws in second-class townships are scattered throughout the sections regarding roads and highways. [2]

   The second-class township laws also contained official map legislation which reserves and restricts proposed right-of-ways from developments that are designated on the official township map.

   The laws regarding sewerage and water service, control, and treatment, are similar to the first-class township laws.

   The laws regarding the health functions are also similar to the first-class township laws, except that the health board in second-class townships is called a sanitary board, the staff is called a sanitary officer, and the building code laws are not nearly as explicit as the first-class township laws.

4. Borough Code. The enabling acts, for all practical purposes, are similar for boroughs and first-class townships regarding planning and environmental health.

5. Third-class City Codes. Generally, the third-class city codes relating to environmental health planning are similar to the borough codes, with the following exceptions. [3]

A. Items that may be regulated, are listed in the third class city codes, that are not listed in the borough codes as follows: density of occupancy of buildings, removal of building, the materials used in their construction with reference to their combustibility and the fire-proof characteristics of the roofs of buildings, reduction of the possibilities of contagious diseases and infections, and the avoidance of slums. The fact that any of these items specified in the Third-Class City Code may not be particularly specified in the Borough Code, does not justify an inference that such matters are not covered by the terms of the Borough Code, i. e., boroughs also may be empowered to regulate some such matters. For example, while it is explicitly provided that councils of Third-Class Cities may regulate and restrict "the density of occupancy of buildings and structures," and no such specification appears in the Borough Code, boroughs might, yet in a proper case, restrict building occupancy under the guise of regulating "the density of populations, the location and use of buildings, securing safety from fire, panic, and other dangers," or under yet other terms of the Borough Code.

This same observation applies to the other municipal codes, also.

B. Provisions of the zoning code may be supplied by references to the city building code. Any building in a prohibited zone may be a public nuisance and abatable as such.

C. Subdivision regulations may be enforced for a distance of three miles past the municipal boundaries.

D. Third-class cities may adopt official maps showing lines of streets and parks and playgrounds, only and prevent building within such lines. There is no authorization for a grant of permission by council to owners to show hardship to build within lines of mapped areas.

PROPOSALS OF PENNSYLVANIA PLANNING CODE

The Pennsylvania Planning Association, which was formed to assist political subdivisions in the solution of community problems and encourage sound planning practices, prepared an example uniform code for municipal planning laws in order to consolidate and simplify the legislation for planning. This code was aided in its preparation by the Pennsylvania State Planning Board and was nine years in the making.

The recommendations of professional planners, planning agencies, attorneys and elected local and state officials went into the composition of the Code, which was later drafted in the form of a bill before the Pennsylvania House of Representative in 1965. The bill was passed by the State Senate when the General Assembly was adjourned. It is hoped that the bill will pass both Houses of the Legislature in 1966, and be signed into law by the Governor.

Some of the main features of the recommended Planning Code are as follows:

Uniformity in Application

At present, the enabling legislation authorizing the processes of municipal planning is spread over numerous separate acts with little relationship to each other. The Planning Code combines all of the enabling Legislation in one law and eliminates or clarifies the conflicting sections.

Decisions Firmly Vested in Elected Officials

The Planning Code places responsibility for planning and development decisions at the elected official level. The planning agency functions only as a staff except where the local governing body itself elects to delegate certain administrative responsibility to it.

Functions of Planning Agency Firmly Established

The code requires governing bodies to seek the planning agency's advice before taking certain actions relating to development, building, planning, and zoning.

Comprehensive Plan Encouraged

The planning agency is required, under the Code, to prepare a comprehensive plan for the governing body to consider.

More Flexibility, More Choice, in Local Planning

The Code is an enabling act which will allow each governing body to decide the scope of its planning implementation activity, cooperating with other municipalities in the same general area of its desires.

Planned Unit Development

The Code provides for Planned Unit Development which permits a variation from conventional lot layout patterns for more variety in housing economy to the buyer, comfort, and open space.

Appeals Simplified

The Code simplifies the zoning and subdivision appeal procedure.

In essence, this Code will update and replace the scattered laws on planning, subdivision control, official mapping and zoning which now differ illogically among the various classes of local government. It would provide a uniformity which would be helpful, not only to planners and lawyers, but also to builders and developers. Although the environmental health function is not specifically mentioned in this code, environmental health is implied throughout this Code, in sufficient basis it is believed that no modification is needed.

PHASE III

RECOMMENDATIONS

IMPLEMENTATION

Recommendations

WATER

"ERIELAND 2000"

WATER COMMITTEE

RECOMMENDATIONS

1. That the Erie County Planning Commission Metropolitan Water System Study of October 1964, prepared by the Chester Engineers, be implemented where possible.

2. That all municipalities adopt ordinances requiring approval by County and/or State Health Department, of private and semi-public water systems within their jurisdiction.

3. That existing water systems be incorporated by acquisition, or contractual agreement, into the proposed Metropolitan System, using existing facilities where possible.

4. That the water system be extended as soon as possible, into areas having problems with water of either insufficient quantity or poor quality.

5. In cases where needed, water use rates should be adjusted to meet the needs of water systems so that they can be self-sustaining and operate independently of other municipal and county finances.

Recommendations

LIQUID WASTES

"ERIELAND 2000"

LIQUID WASTES COMMITTEE

RECOMMENDATIONS

1. A county-wide master plan for sewage and industrial waste collection and treatment should be developed and implemented under the leadership of city and county officials.

2. The City of Erie treatment plant should be expanded as currently proposed and the program plan for the separation of combined sewers implemented.

3. Industrial waste treatment facilities must be expanded as needed, to comply with the requirements of the Sanitary Water Board.

4. The program for improving Lake Erie as outlined in the Public Health Service Conference in 1965, should be supported and accelerated with substantial Federal funds.

5. The educational programs provided by the County Agriculture Agents in the use of pesticides, fertilizers and erosion control, should be further strengthened.

Recommendations

SOLID WASTES

Recommendations

SOLID WASTES

"ERIELAND 2000"

SOLID WASTES COMMITTEE

RECOMMENDATIONS

1. The Commissioners of Erie County, with the support of the local officials, should establish and form a "Solid Waste Disposal Authority" which would provide the entire county with properly controlled, and suitably located, disposal facilities and sites.

2. Application should be made immediately to the State of Pennsylvania and to the Federal Government for funds to make a thorough study of solid waste problems in Erie County, and to develop a master plan for solid waste disposal in the entire county. (Study under way.)

3. The "Solid Waste Disposal Authority" should coordinate a master solid waste plan for Erie County as soon as it has been developed with future land-use plans, and implement its operation at the earliest possible date.

4. Necessary legislation should be established to eliminate open dumping and open burning in Erie County.

5. The collection of solid wastes in the urban areas of Erie County, should be on the basis of no less than two collections per week during the summer months.

6. The "Solid Waste Disposal Authority" should assume the responsibility for, and develop a plan with, industry in Erie County for the handling and disposal of industrial wastes in a safe, sanitary, and acceptable manner.

7. The "Solid Waste Disposal Authority" should assume the responsibility for the control of junk autos and other bulky wastes, and should establish regulations to ensure adequate storage, handling, processing, and disposal of these wastes.

8. Planning authorities in Erie County should include land for solid waste disposal sites in current land-use plans.

Recommendations

AIR POLLUTION

"ERIELAND 2000"

AIR POLLUTION COMMITTEE

RECOMMENDATIONS

1. An intermunicipal agency be established to coordinate all air pollution activities in the City and County. This agency shall be staffed and equipped to permit it to execute recommendations below listed, plus any additional measures found to be necessary to provide an effective air pollution control program in the City and County.

2. The intermunicipal agency apply to the U. S. Department of Health, Education, and Welfare, for funds to establish and develop an air pollution control program in accordance with provisions contained in the Clean Air Act of 1963, P. L. 88-206.

3. The intermunicipal agency develop rules and regulations as may be found to be necessary for the control of air pollution, through a comprehensive study of air quality, and through an inventory of air pollution sources. Immediate attention should be focused on regulations to control problems resulting from open burning and the combustion of fuels.

4. The intermunicipal agency establish a permanent monitoring program to provide an adequate record of air quality.

5. The intermunicipal agency not enter into the field of automotive exhaust control, pending the results of the U. S. Department of Health, Education, and Welfare's program, as authorized by the Motor Vehicle Air Pollution Control Act, Title II, P. L. 89-272.

6. The intermunicipal agency cooperate with the parties responsible for the control of solid wastes, to develop methods of waste disposal which minimize air pollution. Federal funds for solid waste disposal demonstration projects are available under the Solid Waste Disposal Act, Title III, P. L. 89-272.

Recommendations

HOUSING

"ERIELAND 2000"

HOUSING COMMITTEE

RECOMMENDATIONS

LEGISLATION

1. Housing enforcement codes should be adopted and implemented by the individual municipalities with technical and administrative assistance from the County Health Department. Codes should be patterned after one of the acceptable standard model codes, preferably the tentative A. P. H. A. - P. H. S. Proposed Model Code.

2. State Laws should be enacted to permit the adoption of County-wide Housing Enforcement and related Codes.

3. The Housing Code and all related codes should be reviewed annually and up-dated when necessary.

HOUSING ADMINISTRATION

4. The City of Erie should expand the housing administration and code enforcement activities, by the employment of additional staff personnel to meet the minimum staff requirements of the Department of Housing and Urban Development, and the United States Public Health Service.

5. Administrative provisions of the respective housing codes should be such, that support agreements or contractual arrangements with the County Health Department for personal services are possible and maximum utilization made of such services wherever feasible in the interest of economy and/or better services.

6. Strengthening of the enforcement provisions of all city codes affecting housing, should be investigated. All rodent and miscellaneous complaint investigations, except those directly involved with dwellings, should be transferred from the Division of Housing to the Division of Communicable Disease.

7. The use of "occupancy permits" to prevent the re-use of vacant sub-standard dwellings should be employed.

FINANCIAL ASSISTANCE

8. Federal and State financial assistance should be utilized to the fullest extent, for local, general, and concentrated code enforcement programs; for "spot" demolition of unsafe structures; and for all available local, Stated, and Federal training programs for housing inspectors.

9. Programs of rehabilitation and neighborhood conservation, using all available local, State, and Federal support, should be accelerated.

WELFARE AND RELOCATION SERVICES

10. Local welfare agencies and the Greater Erie Anti -poverty Action Committee, should maintain contract with housing code enforcement personnel in order to provide a broader approach to community problems involving all aspects of housing and particularly the relocation of displaced persons, through a well-organized program under the responsibility of a single municipal agency.

Recommendations

RECREATION

"ERIELAND 2000"

RECREATION COMMITTEE

RECOMMENDATIONS

COUNTY

1. That acquisition of sites to meet current and future needs, proceed as rapidly as possible following the guidelines of the recreation plan suggested. It should be pointed out here that the early development of all recreation land is not necessary. Some can be left undeveloped for the benefit of campers, hikers, and cyclists. Development for more formal types of recreation can be accomplished gradually as required, and financed out of normal revenue.

2. That immediate attention be given to the acquisition of lakefront property suitable for development of recreational facilities, including bathing. Property surrounding the County's inland lakes should be given equal priority.

3. That local zoning and subdivision regulations encourage and/or require developers to set aside areas for neighborhood recreational activity.

4. That public school sites be utilized for community and neighborhood activity by the general public during non-school hours and during the summer months, and that the selection of future school sites consider the dual use of such land for school-sponsored events and general public recreation activity. School authorities, planning and recreation agencies, should work closely to establish local standards for such combined facilities.

5. To supplement the regional parks, the local municipalities should strive to attain a standard of ten acres of parkland per thousand ultimate population. Where feasible, development of municipal parks along creek valleys to link with County parks, would be highly desirable.

6. That most of the land in the creek valleys, should remain in private ownership, and be properly zoned to protect it from intense development and preserved as part of the County's open space resources.

7. The development of private recreational facilities to supplement the public facilities,should be encouraged to expand the recreational opportunities and tourist industry in Erie County.

8. The County should issue revenue bonds for the development of a County Golf Course and the development of its existing County Parks.

Recommendations

GENERAL HEALTH

"ERIELAND 2000"

GENERAL HEALTH COMMITTEE

RECOMMENDATIONS

LONG RANGE

1. Combination of City and County Departments of Health, including facilities and personnel.

    a. As a guide to develop an effective program[1] the combined department should provide the following methods if not already established (see Addendum).

2. Organization of a technical environmental health committee (water, sewage, refuse disposal, air pollution, planning, landfill, and environmental health directors) for environmental health planning.

ERIE COUNTY DEPARTMENT OF HEALTH

1. Immediate action should be taken to acquire adequate quarters to house the entire department under one roof, keeping in mind the possible amalgamation of the City Health Department.

2. The plans of the various programs, short and long term, with evaluation, should be done on a regular basis by the Environmental Health unit and coordinated with County Planning and the regional office of the State Health Department.

3. A Civil Service classification plan similar to the State Health Department, should be set up for Health Department employees.

4. A planned in-service education program should be instituted on a regular basis for all Health Department employees.

5. Additional educational opportunities for advanced or graduate training, should be made available and employees encouraged to participate.

6. Steps should be taken to include beauty and barber shop sanitation inspections in the Environmental Health Division's duties.

7. An Office of Vital Statistics should be formed in the Health Department, so that local statistics can be used to plan essential activities.

8. A close liason should be established between the Environmental Health Office of the Health Department and County Planning and Recreation Departments, in order to advise them on environmental health matters.

9. A meat and milk inspection program should be instituted by the County Health Department.

10. Future County Health Department budgets should include additional funds for demoliton of condemned housing as well as chemicals for rodent and vector control.

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[1] The Local Health Department - Services and responsibilities. An official Statement of the American Public Health Association; Adopted November 1, 1950.

INTERMEDIATE RECOMMENDATIONS

ERIE CITY HEALTH DEPARTMENT

1. An Office of Air Pollution Control should be established and placed under auspices of the Health Department.

2. Restoration of the Meat and Milk Inspection Program should be instituted by the City Health Department as permitted by the Third-Class City Code, and required by City Ordinance.

3. Application by Health Department to State and Federal Governments, for categorical funds to expand present services and develop new ones.

4. Future City Health Department budgets should include additional funds for demolition of condemned housing, as well as chemicals for rodent and vector control.

5. A planned in-service education program should be instituted on a regular basis for all Health Department employees.

6. Additional education opportunities for advanced or graduate training should be made available and employees encouraged to participate.

7. A Civil Service Classification plan, similar to the State Health Department, should be set up for Health Department employees.

8. An Office of Occupational Health should be formed and placed under the auspices of the City Health Department.

9. An Office of Vital Statistics should be formed in the Health Department so that local statistics can be used to plan essential activities.

10. A close liason should be established between the Environmental Health Office of the Health Department and the City Planning Office, in order to advise the Planning Commission on environmental health matters.

Recommendations

PLANNING

"ERIELAND 2000"

PLANNING COMMITTEE

RECOMMENDATIONS

FINDINGS

1. In the past, many of the municipalities in Erie County have adopted codes and ordinances without professional advice and assistance.

2. The codes and ordinances adopted by one municipality are often completely unrelated to similar legislation adopted in adjacent municipalities.

3. Enforcement of codes and ordinances in most of the municipalities in Erie County, has often been haphazard and ineffective.

4. The divergence of state legislation regulating community health and planning activities in the various classes of local governments, counties, townships, cities, and boroughs - leads to unnecessary confusion and creates difficulties in administering community health and planning programs at the local level.

5. The greatest part of the community planning undertaken by municipalities in Erie County, was initiated with Federal financial assistance under the "701" Program. Where Federal financial assistance is not available, these municipalities have been hesitant to provide the funds necessary to support the planning function.

6. The Erie County Planning Commission has coordinated much of the planning activity that has resulted in the preparation of Master Plans for individual municipalities within Erie County.

7. Municipalities within Erie County have, in most instances, taken only very limited steps to realize recommendations for improvements in physical and environmental health conditions that have been prepared in those municipalities.

RECOMMENDATIONS

1. Municipalities that do not have their own professional planning staff should seek assistance from the Erie County Planning Department in adopting planning codes and ordinances.

2. In adopting codes and ordinances, municipalities should attempt to coordinate such regulations with those that are adopted in adjacent municipalities. Consideration should be given to adoption of similar or identical codes and ordinances in all municipalities sharing common characteristics and problems.

3. More effective implementation of codes and ordinances adopted by municipalities must be achieved if the objectives contained in Master Plans established in such municipalities are to be realized.

4. Municipalities that lack resources for implementing codes and ordinances should authorize their enforcement by appropriate departments of County Government.

5. The staff and resources of the Erie County Planning Department must be enlarged to permit it to fulfill the enlarged responsibilities that have been proposed.

6. The County Planning Department should establish distinct elements of its staff for the conduct of urban planning studies, rural planning studies, plan enforcement activities, and the County Urban Renewal Program.

7. An in-serivce training program in municipal administration and management for local government officials should be sponsored by Erie County Government.

8. The Pennsylvania General Assembly should be encouraged to adopt a state code that would strengthen community planning and health activities in local communities and eliminate unnecessary divergences in the laws applicable to particular classes of municipalities.

9. Erie County and individual municipalities within the County must commit themselves to appropriate substantially larger funds in support of the planning function and the enforcement of codes and ordinances adopted in accordance with Master Plan recommendations.

10. That County and City Planning Offices combine efforts on any preparations necessary to qualify the metropolitan area for assistnace under Federal Demonstration Programs.

Implementation

SOLID WASTES
HOUSING
STATEMENT OF PROGRESS

Phone 866-9151

OFFICE OF
Erie County Department of Health
4728 Lake Pleasant Road
ERIE, PENNSYLVANIA 16504

William O. Hill, Jr.
Louis J. Rzymek
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Commissioners of
Erie County, Pennsylvania

F. S. Shubert, M.D.
Deputy Director
Board of Health
Russell B. Roth, M.D.
R. C. McChesney, D.D.S.
S. E. Cronen, M.D.
J. E. Brown, M.D.
Luman C. DeLong

February 4, 1967

The old concept, not often used by official agencies, of helping people to help themselves, has been used most effectively in this venture.

The impact of the environmental health study, "Erieland 2000", has only begun to be felt on a community-wide basis. The first shock waves came shortly after the onset of the study itself. Although viewed by professionals and laity in the community with considerable skepticism as just another study, it has initiated directly and indirectly important changes. In fact, the recommendations in several reports had to be changed because implementation came shortly after the recommendation was made by the categorical committees and about a year before the entire report was to be officially released.

Some of the changes recommended by the eight categorical committees and implemented prior to official release were:

Application for federal grant to conduct a county-wide solid waste study and draft of a master plan (the funds have been received and the study is under way).

Application by the City Health Department to the State for monetary assistance (this has been done and the Health Department is now receiving State funds).

Combination of City and County Health Departments (this has been done on a personnel basis, but not physically; the county now supplies the city, on a contract basis, technical personnel).

County government is taking steps to place the Health Department employees under the merit system.

The City Housing Section now has housing inspectors in uniforms--the first in the nation, or so we believe.

The City of Erie is now contracting services from the County Planning Office.

Public Health is an Organized Community Effort Aimed at the Prevention of Disease,
Prolonging Life, and Improving Emotional and Physical Efficiency.

Erie County government has had plans drawn up and has called for bids on a new building for the County Health Department.

The Smoke Abatement office in the City of Erie is now being considered by the City Health Department for assimilation as an air pollution section.

Possibly the most far-reaching effect of this report is that it is expected to add considerable weight to the City of Erie's application for a Demonstration Cities Grant.

These are but a few of the many changes exhibited over the past year and a half. We expect more. Implementation, or coercion for action, on the remaining recommendations will be the main project of an organized group of citizens in Erie County. With assistance, they will help finish what we have started.

Gerald Farmer

Gerald Farmer, Chairman
"Erieland 2000"

GF/atc

ERIE COUNTY DEPARTMENT OF HEALTH
Division of Environmental Health
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Erie, Pennsylvania 16502

William O. Hill, Jr.
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F. S. SHUBERT, M. D.
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BOARD OF HEALTH
Russell B. Roth, M. D.
R. C. McChesney, D.D. S.
Paul S. Crossman
L. H. Jenkins
G. H. Ledger, M. D.

August 16, 1966

Erie County Commissioners
County Court House
Erie, Pennsylvania

Gentlemen:

The following recommendations are made concerning the proposed refuse survey in Erie County.

1. That the officials of Erie County be the contractors for this survey.
2. That the Michael Baker, Jr., Company, Inc., P. O. Box 111, Rochester, Pennsylvania, be retained by the County Commissioners to conduct this survey. Our past knowledge of this company indicates that they do excellent work.
3. That the work of the survey be started by the first of September, or sooner if possible, and be completed by the end of May 1967.
4. That this company be instructed to complete the disposal method and location part of the survey during the next three months. This will aid in relieving the disposal problem that exists at this time.
5. That the Michael Baker, Jr., Company consult with the Health Department during each phase of the survey and give interim reports so that the County Health Department can be aware of the progress that is being made.

Very truly yours,

Felix S. Shubert, M.D.

Felix S. Shubert, M. D.
Deputy Director

City of Erie
Department of Public Safety
Joseph W. Sinnott, Director

BUREAU OF HEALTH HOUSING DIVISION

Dr. F. S. Shubert
Health Director

James McLaughlin, Chief
Housing & Rodent Control

January 24, 1967

Results to-date from Erieland 2000 housing recommendations:

1. One additional housing inspector has been hired.
2. A two-week Housing Inspectors Basic Training Course has been scheduled for April 1967.
3. Housing inspectors have been provided with uniforms for better identification.
4. One housing inspector has been designated as a nuisance complaint specialist, for better control of this expanding function.
5. Instituted, with the cooperation and support of Mayor Louis J. Tullio, a more stringent code enforcement policy, particularly in relation to flagrant code violators.
6. Instituted with the cooperation and support of the Mayor, a more extensive campaign to rid the city of abandoned and condemned dwellings. A total of 30 of these structures were demolished.
7. Participated in an 8 week "In-Service Training" Program for all city inspectors.

PRESS COVERAGE

IMPLEMENTATION

Council To Take Step On Health Bureau Need

City Council next week will take the first step toward assuring approximately $43,000 this year in state funds for the city health bureau, it was reported Wednsday.

Councilmen Bernard J. Harkins and Robert Glowacki told The Morning News the proposal to "share" county health department aides in order to qualify for state funds would be on the business agenda.

By using certain personnel from the county health agency, the city's health bureau will meet quantity and quality standards as far as peronnel is concerned, and also will be able to broaden services, another state requirement.

Harkins and Glowacki said amending of the budget should be accomplished before the end of July, enabling the city to qualify for state funds from July through December.

The city never has received a state health subsidy.

The State Health Department grant normally would be 50 per cent of the operating budget of approximately $177,000, or $85,000 —but this year, Erie would get half of the $85,000.

A full grant of half the budget could be expected next yar.

In an exclusive Morning News story last week, Dr. Carl Kuehn, director, Bureau of Field Services with the State Health Department, said a merger would be only one of two alternatives.

Although he said the state would prefer the complete merger, he said the "sharing" arrangement would be acceptable to the state, also.

Harkins and Glowacki said they felt the entire City Council would support the sharing proposal.

County Commissioners have already given their consent to "lend" certain employes to the city.

"It is about time the city gets a share of these funds, for they have been available for many years," Glowacki said.

Health Dept. Facility Under Study

A recommended design for a single county health department facility—submitted by Dr. Felix S. Shubert, county health director—was tabled for further study Monday by county commissioners.

The design calls for building space at least 100 feet by 60 feet to house 32 individual rooms.

The new facilities would replace the county offices which are now scattered throughout the county. Main quarters are now at 2101 Peach and at the county hospital annex on Lake Pleasant Rd.

County commissioners have been studying replacement of the health offices since last October when they branded existing facilities "disgraceful."

Dr. Shubert submitted no cost estimate with his proposed design.

Commissioners are still seeking an existing building that can be converted to use by the health department.

County Gets Funds For Refuse Study

County commissioners today received formal notification from the U.S. Public Health Service that $22,665 has been allocated for a refuse disposal study.

The grant is for a period from June 1 to May 31, 1967.

Commissioners have authorized the Planning Department and the Health Department to prepare specifications for bidding on the study.

In addition, the federal agency has recommended an additional $6,666 for more work from June 1, 1967 to May 31, 1968.

Estimated cost of the study has been set at about $33,000.

About $2-3,000 of the local share above the first year grant allowance will consist of services by the health department, leaving a direct cash outlay of $8-9,000.

It is expected the study could be completed within 4-5 months.

Ask State Aid City Health Bureau

Mayor Louis J. Tullio has requested financial aid from the state to assist the City Health Department.

His request is contained in a letter to Dr. Chrales L. Wilbar, secretary of the State Department of Health.

The mayor asks for no specific amounts of money.

State funds are available to local health departments under a 1951 act of the General Assembly.

"We feel that the health department of the City of Erie does qualify for state grants.

"With financial assistance from the state we will be able to bring together some loose ends, add some needed personnel to the health department staff and render more and better services to our people," the mayor's letter read.